RESIDENCES AT CHESTNUT BUILDING 1



PREPARED FOR LINCOLN CAPITAL ACQUISITION, LLC

401 WILSHIRE BOULEVARD, SUITE 1070 SANTA MONICA, CA 90401

SITE DEVELOPMENT DRAWINGS

TAX MAP 73 LOT 1 · 351 CHESTNUT STREET

MANCHESTER · NEW HAMPSHIRE · 03101

MAY 23, 2022



PREPARED BY FUSS&O'NEILL

50 COMMERCIAL STREET MANCHESTER, NEW HAMPSHIRE 03101 603.668.8223 www.fando.com

PROJECT TEAM

ENGINEER, SURVEYOR,
AND LANDSCAPE ARCHITECT
FUSS & O'NEILL
50 COMMERCIAL STREET
MANCHESTER, NH 03101

ARCHITECT MARKET SQUARE ARCHITECTS

104 CONGRESS ST. STE PORTSMOUTH, NH 03801 603.501.0202

SHEET INDEX

SHEET NO.	SHEET NAME	REVISION DAT
GI-100	COVER SHEET	05/23/2022
G1-101 - GI-103	GENERAL NOTES	05/23/2022
SV-101 & SV-103	ALTA/NSPS LAND TITLE SURVEY	03/25/2022
EX-101	CIVIL EXISTING CONDITIONS PLAN	05/23/2022
CP-101	CIVIL DEMOLITION AND REMOVALS PLAN	05/23/2022
CS-101	CIVIL SITE PLAN UPPER LEVELS	05/23/2022
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CT-101	CIVIL TRAFFIC CIRCULATION PLAN	05/23/2022
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CU-101	CIVIL UTILITY PLAN	05/23/2022
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LS-102	COURTYARD MATERIALS PLAN	05/23/2022
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CD-501	CIVIL DETAILS - ROADWAY, SITE, & PAVEMENT	05/23/2022
CD-502	CIVIL DETAILS - SIDEWALK & SITE	05/23/2022
CD-503	CIVIL DETAILS - SIGNAGE & PAVEMENT MARKINGS	05/23/2022
CD-504	CIVIL DETAILS - WATER & ELECTRIC	05/23/2022
CD-505	CIVIL DETAILS - STORMWATER	05/23/2022
CD-506	CIVIL DETAILS - SEWER	05/23/2022
CD-507	CIVIL DETAILS - EROSION CONTROL	05/23/2022
CD-508	CIVIL DETAILS - EROSION CONTROL	05/23/2022

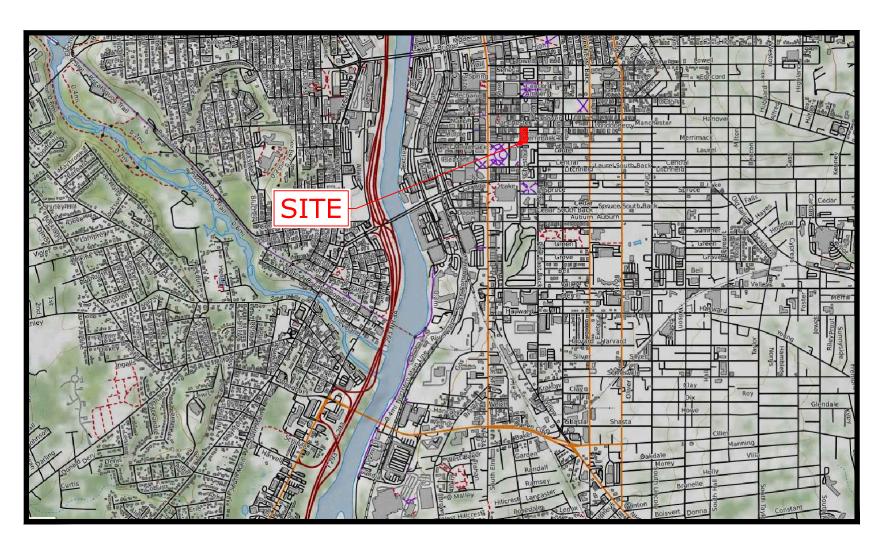
ARCHITECTURAL PLANS AND RENDERINGS CREATED BY MARKET SQUARE ARCHITECTS

PROGRESS SET

PLANS UNDER DESIGN DEVELOPMENT ISSUED FOR INTERIM REVIEW ONLY.

PENDING CITY APPROVAL.

NOT FOR CONSTRUCTION.



LOCATION MAP

SCALE: 1" = 2000'



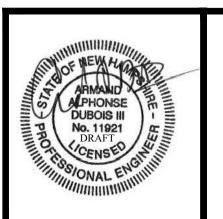
CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION

THE LOCATION OF ANY UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. FUSS & O'NEILL MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES SHOWN. 72 HOURS PRIOR TO ANY EXCAVATION ON SITE, THE CONTRACTOR SHALL CONTACT DIG-SAFE AT 1-888-DIG-SAFE.

NPDES NOTE:

THIS PROJECT DISTURBS 36,000±SF FOR BUILDING 1 (0.85± AC) OF LAND WHICH DOES NOT EXCEED THE NPDES THRESHOLD AMOUNT OF 43,560 SF (1 AC). THEREFORE, THE PROJECT HAS THE OPTION TO OBTAIN NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT COVERAGE AS ISSUED BY THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA). THE OWNER/DEVELOPER AND "OPERATOR" (GENERAL CONTRACTOR) HAVE THE OPTION TO PREPARE AND SUBMIT A NOTICE OF INTENT (NOI) TO THE EPA PRIOR TO THE START OF CONSTRUCTION AND SHALL BE RESPONSIBLE FOR THE PREPARATION AND IMPLEMENTATION OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MEETING THE REQUIREMENTS OF THE CURRENT NPDES PERMIT. SEE NPDES NOTES ON SHEET GI-101.

REQUIRED APPROVALS DATE APPROVED EXPIRATION DATE PLANNING BOARD PENDING CONDITIONAL USE PERMIT - ALLOW RESIDENTIAL WITHIN CBD ZONE PENDING **ZONING BOARD** ZBA2022-031 04/14/2024 **VARIANCE** 04/14/2022 ARTICLE 8.04 - MULTIFAMILY DENSITY 51 UNITS PERMITTED, GRANTED UP TO 110 UNITS ARTICLE 8.27(E) - VISIBILITY AT CORNER PERMITTED TO REDUCE FROM THE 30' REQUIRED PENDING SEWER CONNECTION PERMIT



IT IS HEREBY AGREED THAT, AS THE OWNER/DEVELOPER OF THE PROPERTY (OR OWNER/DEVELOPER'S REPRESENTATIVE), I WILL CONSTRUCT THE PROJECT AS APPROVED AND AS SHOWN ON THE ENCLOSED SET OF PLANS. FURTHER, I AGREE TO MAINTAIN THE SITE IMPROVEMENTS FOR THE DURATION OF

OWNER/DEVELOPER (OR REPRESENTATIVE)

PROJ. No.: 20191236.A10

DATE: MAY 2022

RESERVED FOR CITY APPROVAL

GI-100

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ABBREVIATIONS

HYD HYDRANT

GENERAL			
APRX.	APPROXIMATE	PCC	PRE CAST
BIT.	BITUMINOUS		CONCRETE CURB
BW	BOTTOM OF WALL	PROP	PROPOSED
CC	CONCRETE CURB	REM	REMOVE
BCC	CAPE CODE BERM	R&D	REMOVE AND DISPOS
CONC.	CONCRETE	R&R	REMOVE AND RESET
ELEV	ELEVATION	R&S	REMOVE AND STACK
EXIST	EXISTING	TOS	TOP OF SLOPE
GC	GRANITE CURB	TW	TOP OF WALL
MAX	MAXIMUM	TYP	TYPICAL
MIN	MINIMUM	VGC	VERTICAL GRANITE
NTS	NOT TO SCALE		CURB
	'		

UTILITY			
CB	CATCH BASIN	INV	INVERT ELEVATION
CMP	CORRUGATED METAL PIPE	PVC	POLYVINYL
CPP	CORRUGATED		CHLORIDE PIPE
	POLYETHYLENE PIPE	RCP	REINFORCED
DCB	DOUBLE CATCH BASIN		CONCRETE PIPE
DI	DUCTILE IRON PIPE	RD	ROOF DRAIN
F&G	FRAME AND GRATE	SMH	SEWER MANHOLE
F&C	FRAME AND COVER	TSV	TAPPING SLEEVE,
HDPE	HIGH DENSITY		VALVE AND BOX
	POLYETHYLENE PIPE		.,

LEGEND (CONT.)

UP UTILITY POLE

	- D	STORM DRAINAGE PIPE
	- U	UNDERDRAIN
	- s ———	SANITARY SEWER PIPE
	OHW	OVERHEAD WIRES
	– w———	WATER MAIN
	- G	UNDERGROUND GAS
U		UNDERGROUND ELECTR TELEPHONE, AND CABL
EXIST	PROP	RIPRAP
(\$)	S	SANITARY MANHOLE
	0	STORM MANHOLE
E	(E)	ELECTRIC MANHOLE
	\bigcirc	TELEPHONE MANHOLE
		CATCH BASIN
		DOUBLE CATCHBASIN
WV N	wv 	WATER VALVE
====	-	FIRE HYDRANT
ø	ø	UTILITY POLE
\otimes	8	BOLLARD/POST
	- o -	SIGN
O ^{GG}	o ^{GG}	GAS GATE
\$	\$	LIGHTPOLE
		FLARED END
	\odot	DECIDUOUS TREE

NPDES NOTES:

- 1. THIS PROJECT DISTURBS 36,000±SF FOR BUILDING 1 (0.85± AC) OF LAND WHICH DOES NOT EXCEED THE NPDES THRESHOLD AMOUNT OF 43,560 SF (1 AC). THEREFORE, THE PROJECT HAS THE OPTION TO OBTAIN NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT COVERAGE AS ISSUED BY THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA). THE OWNER/DEVELOPER AND "OPERATOR" (GENERAL CONTRACTOR) HAVE THE OPTION TO PREPARE AND SUBMIT A NOTICE OF INTENT (NOI) TO THE EPA PRIOR TO THE START OF CONSTRUCTION AND SHALL BE RESPONSIBLE FOR THE PREPARATION AND IMPLEMENTATION OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MEETING THE REQUIREMENTS OF THE CURRENT NPDES PERMIT. SEE NPDES NOTES ON SHEET GI-101.
- 2. IF COMPLETED A COPY OF THE NOI AND SWPPP SHALL BE PROVIDED TO THE CITY PLANNING DEPARTMENT AND DPW/EPD, PERMIT ISSUANCE SHALL BE REQUIRED PRIOR TO DPW/EPD SIGN OFF.
- 3. COMPLETION OF EROSION CONTROL INSPECTIONS DURING CONSTRUCTION SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- 4. DPW/EPD ARE TO BE COPIED ON PERMIT COMPLIANCE INCLUDING SUBMISSION OF THE SWPPP AND INSPECTION DOCUMENTS DURING CONSTRUCTION, IF COMPLETED.
- 5. IF COMPLETED, THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND EROSION CONTROL INSPECTION RECORDS SHALL BE MAINTAINED ON SITE AT ALL TIMES DURING CONSTRUCTION. DPW STAFF SHOULD ALSO BE COPIED ON PERMIT COMPLIANCE INCLUDING SUBMISSION OF THE SWPPP AND HAVE ACCESS TO EROSION CONTROL INSPECTION DOCUMENTS DURING CONSTRUCTION.

REGULATORY REQUIREMENTS NOTES

- 1. PROVIDE TRAFFIC SIGNAGE AND PAVEMENT MARKINGS IN CONFORMANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST OSHA STANDARDS, STATE AND LOCAL REQUIREMENTS, AND CITY OF MANCHESTER REQUIREMENTS, POLICIES, AND SPECIFICATIONS.

EROSION AND SEDIMENT CONTROL NOTES

- INSTALL EROSION CONTROL MEASURES PRIOR TO STARTING ANY WORK ON THE SITE.
- 2. IMPLEMENT ALL NECESSARY MEASURES REQUIRED TO CONTROL STORMWATER RUNOFF, DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE. PERFORM CORRECTIVE ACTION AS NEEDED FOR EROSION CLEANUP AND REPAIRS TO OFF SITE AREAS, IF ANY, AT NO COST TO OWNER.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN IN THE PLANS THROUGHOUT THE DURATION OF THE PROJECT IN ACCORDANCE WITH APPLICABLE NHDES STANDARDS. THE DETAILS PROVIDED SERVE AS A GUIDE ONLY.
- 4. INSPECT AND MAINTAIN EROSION CONTROL MEASURES PER TYPICAL STANDARDS. DISPOSE OF SEDIMENT IN AN UPLAND AREA. DO NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS.
- 5. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED TO STOP ANY EROSION ON THE CONSTRUCTION SITE, THE PROPERTY OWNER SHALL BE REQUIRED TO
- INSTALL THE NECESSARY EROSION PROTECTION AT NO EXPENSE TO THE MUNICIPALITY. 6. ALL PROPOSED AND EXISTING CATCH BASINS, THAT MAY RECEIVE STORMWATER RUNOFF FROM THE
- DEVELOPMENT DURING CONSTRUCTION, SHOULD BE OUTFITTED WITH INLET PROTECTION 7. PERFORM CONSTRUCTION SEQUENCING IN SUCH A MANNER TO CONTROL EROSION AND TO MINIMIZE THE TIME
- THAT EARTH MATERIALS ARE EXPOSED BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED. 8. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, REMOVE AND DISPOSE OF TEMPORARY EROSION CONTROL MEASURES. CLEAN SEDIMENT AND DEBRIS FROM TEMPORARY MEASURES AND FROM PERMANENT STORM DRAINAGE
- 9. THE CONTRACTOR SHALL INSPECT ALL TEMPORARY EROSION CONTROL MEASURES AT LEAST ONCE A WEEK AND WITHIN TWENTY-FOUR (24) HOURS OF THE END OF A STORM WITH RAINFALL AMOUNT GREATER THAN 0.25 INCHES. THE INSPECTIONS SHALL VERIFY THAT THE STRUCTURAL BMPS SHOWN AND DESCRIBED ON THE PLANS ARE IN GOOD CONDITION AND ARE MINIMIZING EROSION. A MAINTENANCE AND INSPECTION REPORT SHALL BE MADE WITH EACH INSPECTION. COMPLETED INSPECTION FORMS SHALL BE KEPT ON-SITE FOR THE DURATION OF THE PROJECT AND BE MADE AVAILABLE FOR REVIEW BY THE CITY OF MANCHESTER UPON REQUEST.
- 10. ALL MANUFACTURED EROSION AND SEDIMENT CONTROL PRODUCTS, EXCEPT FOR SILT FENCE INSTALLED INACCORDANCE WITH ENV-WQ 1506.04, UTILIZED FOR, BUT NOT LIMITED TO, SLOPE PROTECTION, RUNOFF DIVERSION, SLOPE INTERRUPTION, PERIMETER CONTROL, INLET PROTECTION, CHECK DAMS, AND SEDIMENT TRAPS SHALL NOT CONTAIN WELDED PLASTIC, PLASTIC, OR MULTI-FILAMENT OR MONOFILAMENT POLYPROPYLENE NETTING OR MESH.

STORMWATER NOTES:

- 1. THIS PROJECT DISTURBS 35,000±SF FOR BUILDING 1 AND 31,000±SF FOR BUILDING 2, TOTALING 65,800±SF (1.5± AC) OF LAND WHICH DOES NOT EXCEED THE NPDES ALTERATION OF TERRAIN (AOT) THRESHOLD AMOUNT OF 100,000 SF. THEREFORE, THE PROJECT IS NOT REQUIRED TO OBTAIN AN NHDES AOT PERMIT.
- 2. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN IN THE PLANS THROUGHOUT THE DURATION OF THE PROJECT IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND MUNICIPALITY STANDARDS.
- POST CONSTRUCTION, THE PROPERTY OWNER/OPERATOR SHALL SHALL BE RESPONSIBLE FOR MAINTAINING ALL DRAINAGE AND STORMWATER PRACTICES. REFER TO THE STORMWATER REPORT FOR THE OPERATION AND
- WINTER DE-ICING PRODUCT SHALL BE APPLIED BY A GREEN SNOW PRO CERTIFIED CONTRACTOR. REFER TO THE INSPECTION AND MAINTENANCE MANUAL FOR THE WINTER MAINTENANCE AND SALT MINIMIZATION PLAN WITH ASSOCIATED INFORMATION. SALT SHALL NOT BE STORED ON SITE.

NHDES INVASIVE SPECIES NOTES

- 1. IF INVASIVE SPECIES ARE ENCOUNTERED ON SITE THEY SHOULD BE REMOVED ACCORDING TO NHDES
- 2. THE CONTRACTOR SHALL TAKE STEPS TO PREVENT THE SPREAD OF INVASIVE PLANT, INSECT, AND FUNGAL SPECIES BY MEETING THE REQUIREMENTS AND INTENT OF RSA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES. HTTP://GENCOURT.STATE.NH.US/RULES/STATE_AGENCIES/AGR3800.HTML

CONTAMINATED SOIL NOTE

1. DUE TO POTENTIAL SOIL CONTAMINATION, THE DESIGN OF THE SITE IS A NO NET EXPORT SITE. NO SOIL SHALL BE EXPORTED FROM THIS SITE UNLESS COORDINATED WITH NHDES FOR PROPER REMEDIATION, PRIOR TO REMOVAL.

PROPOSED BUILDING FLOOR ELEVATIONS AND SQUARE FOOTAGE:

PROPOSED 5- STORY BUILDING

GARAGE LEVEL ELEV $= 206.0' \pm (24,450 \pm SF)$ FF TRASH ELEV = 208.0'± (COUNTED IN GARAGE LEVEL) LOBBY ELEV = 210.0'± (COUNTED IN GARAGE LEVEL)

FIRST FLOOR ELEV $= 223.0' \pm (25,450 \pm SF)$ SECOND FLOOR ELEV $= 233.0' \pm (19.450 \pm SF)$ $= 243.0' \pm (19,450 \pm SF)$ THIRD FLOOR ELEV $= 253.0' \pm (19,450 \pm SF)$ FOURTH FLOOR ELEV FIFTH FLOOR ELEV $= 264.0' \pm (19,450 \pm SF)$

TOTAL BUILDING AREA 127,700±SF

BUILDING NOTES/ASSUMPTIONS TRANSMITTED FROM DESIGN TEAM:

- EXISTING BUILDING AND FOUNDATION IS TO BE ENTIRELY DEMOLISHED AND REMOVED
- 3.0' THICKNESS OF PODIUM (DEPTH OF STRUCTURE ABOVE GARAGE)
- THIS ALLOWS FOR REQUIRED 98" CLEARANCE FOR ADA STALLS (ADA 502.5)

DRAINAGE MAINTENANCE NOTES

- STEP 1 CLEAN OUT PIPE USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN C. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 2 REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 3 INSPECT AND CLEAN BASINS AND MANHOLES

CATCH BASINS & PIPES

- a. INSPECT CATCH BASINS EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- b. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS

PROPOSED DRAINAGE STRUCTURE SCHEDULE FOR

DMH 1573 RIM EL.=209.80' INV. IN (24" RCP) = 201.3' (PIPE SEALED OFF) INV. IN (10" CLAY) = 202.2' (TOP OF HOOD) BRICK EXISTING INV - FROM BUILDING INV. IN (18" RCP) = 204.5' (PIPE SEALED OFF) CORE NEW INV. IN (18" HDPE) = 200.9' (DMH 105)

INV. OUT = 200.8' 18" RCP CB 100 - DOUBLE GRATE CB WITH HIGH CAPACITY FIN TYPE GRATE RIM ELEV. = 206.3

INV.OUT (12" HDPE) = 203.20 (CB 103)L = 45', 12'' HDPE, S = 0.005

TD 101 - TRENCH DRAIN

RIM ELEV. = 206.20'INV.OUT (12" HDPE) = 202.85 (DMH 102)L = 18', 12" HDPE, S = 0.005

DMH 102

RIM ELEV. = 206.20' INV.IN (12" HDPE) = 202.75' (TD 101)INV.IN (12" HDPE) = 202.75' (CB 103)INV.IN (12" HDPE) = 202.75' (ROOF DRAINS) MATCH ALL CROWNS IN/OUT

INV.OUT (18" HDPE) = 202.25' (DMH 105)L = 74', 18" HDPE, S = 0.005

RIM ELEV. = 206.50'INV.IN (12" HDPE) = 202.95 (CB 100)INV.IN (12" HDPE) = 202.95 (CB 104)INV.OUT (12" HDPE) = 202.85 (DMH 102)L = 13', 12'' HDPE, S = 0.005

CB 103 - WITH HIGH CAPACITY FIN TYPE GRATE

DRAINAGE SCHEDULE NOTES: SEE GENERAL NOTES PLAN SHEETS FOR ADDITIONAL NOTES AND INFORMATION

PROPOSED SEWER STRUCTURE SCHEDULE FOR BOTH BUILDING 1 AND BUILDING 2:

DMH 201 - OIL WATER SEPARATOR

FOR GARAGE. SEE PROPOSED DRAINAGE STRUCTURE SCHEDULE

SMH 300 RIM ELEV. = 205.6' INV.IN (8" PVC) = 201.10' UPPER LEVEL SPURS INV.OUT (8" PVC) = 201.00' (SMH 301)L = 51', 8" PVC, S = 0.005

RIM ELEV. = 206.0'INV.IN (8" PVC) = 200.70' (SMH 300)INV.IN (8" HDPE) = 200.70' (DMH 201-OWS)INV.OUT (8" PVC) = 200.60' (SMH 302)

CONTRACTOR TO VERIFY LOCATION AND INVERT L = 61', 8" PVC, S = 0.005SMH 302 RIM ELEV. = 205.55'INV.IN (8" PVC) = 200.30' (SMH 301)

INV.IN (8" PVC) = 200.30' UPPER LEVEL SPURS INV.OUT (8" PVC) = 200.20' (SMH 310-SEE NOTE THIS PAGE) L = 96', 8" PVC, S = 0.005

SEWER SCHEDULE NOTES:

- MINIMUM 6.0' COVER OVER ALL SEWER LINES AND SEWER SERVICES.
- IN AREAS WITH LESS THAN 6' COVER, INSTALL 2" THICK X 5' WIDE BLUEBOARD INSULATION ABOVE SEWER LINE. REFER TO DETAILS SHEET FOR STRUCTURE AND PIPE RUN DETAILS.

CB 104 - WITH HIGH CAPACITY FIN TYPE GRATE

INV.OUT (12" HDPE) = 203.70' (CB 103)

INV.IN (18" HDPE) = 201.85' (DMH 102)

INV.OUT (18" HDPE) = 201.75' (DMH 1573)

INV.OUT (12" HDPE) = 201.35' (DMH 201)

INV.IN (12" HDPE) = 200.80' (CB 200)

INV.IN (12" HDPE) = 200.80' (CB 202)

INV.OUT (12" HDPE) = 200.70' (SMH 301)

INV.OUT (12" HDPE) = 201.10' (DMH 201)

DMH 201 - OIL WATER SEPARATOR FOR GARAGE

RIM ELEV. = 208.80'

RIM ELEV. = 210.85'

RIM ELEV.=205.25'

RIM ELEV. = 206.00'

RIM ELEV. = 205.25'

CB 202

DMH 105

L = 28', 12'' HDPE, S = 0.025

L = 36', 18" HDPE, S = 0.025

L = 26', 12'' HDPE, S = 0.02

L = 21', 12'' HDPE, S = 0.005

L = 40', 12" HDPE, S = 0.005

BUILDING #1 INVERT = 199.85'

BUILDING #2 INVERT = 202.35'

WYE INTO EXISTING 12" AT 45°

LOCATION PER POLICE STATION PLANS

NECESSARY, COORDINATE WITH DPW.

LOCATION APPROXIMATE, ASSUMED PAVED OVER

UTILIZE EXISTING SERVICE, REPLACE PIPE AS

CALCULATED INV.=199.45'± (EXIST 8" CLAY)

ASSUME INV. =199.70' (FACTOR OF SAFETY)

L = 30', 8" PVC, S = 0.005

L = 35', 8" PVC, S = 0.005

SMH 310

- 4. INSTALL CLEANOUTS AT ALL VERTICAL AND HORIZONTAL BENDS AND A MAXIMUM OF EVERY 75'.
- 5. SEE GENERAL NOTES PLAN SHEETS FOR ADDITIONAL NOTES AND INFORMATION

PROPOSED SEWER FLOWS

PER TABLE 1008-1: DWELLINGS

- **ASSUMPTIONS:**
- 150 GPD/BEDROOM
- 1.5 BEDROOMS PER UNIT 30 SEATS FOR CAFE AREA WITH 3 EMPLOYEES (PAPER FOOD SERVICE)
- 3 EMPLOYEES IN OFFICE (WITHOUT CAFETERIA)

BUILDING 1

RESIDENTIAL UNITS = (1.5 BR/UNIT X 99 UNITS X 150 GPD/BR) = 22,275 GPD

OFFICE = (10 GPD/EMPLOYEE)

= (10 GPD X 3 EMPLOYEES)

= 30 GPD

VEHICLE SNOW MELT/ STORMWATER RUNOFF/DRIP IN PARKING GARAGE UNDER = ASSUME 100 GPD (CONSERVATIVE AMOUNT BASED ON PREVIOUS CONVERSATION WITH NHDES)

TOTAL FLOW BUILDING 1 = 22,405 GALLONS PER DAY PROPOSED

= 22,275 GPD + 30 GPD + 100 GPD

USE PEAKING FACTOR OF 6 FOR PIPE CAPACITY CALC FOR BUILDING 1

= 22,405 GPD/24 HR = 935 GPH

= 935 X 6 = 5,790 GALLONS PER HOUR = 0.22 CFS (PIPE CAPACITY IS $1.7\pm$ CFS) = OK

BUILDING 2

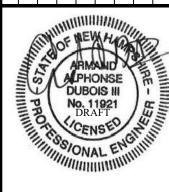
RESIDENTIAL UNITS = 1.5 BR/UNIT X 43 UNITS X 150 GPD/BR) = 9,675 GPD

TOTAL FLOW BUILDING 2 = 9,675 GPD

USE PEAKING FACTOR OF 6 FOR PIPE CAPACITY CALC FOR BUILDING 2

- = 9,675 GPD/24 HR = 410 GPH
- = 410 X 6 = 2,420 GALLONS PER HOUR
- = 0.09 CFS (PIPE CAPACITY IS 1.7± CFS) = OK

INV.IN (6" HDPE) = 202.85' UNDERDRAINS (MATCH CROWNS)







GENER

PROJ. No.: 20211191.A10 DATE: MAY 2022

GI-10

GENERAL PLAN NOTES:

- SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SHOWN ON THE DRAWINGS TO SCALE OR TO THEIR ACTUAL DIMENSION OR LOCATION. COORDINATE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.
- 2. DO NOT RELY SOLELY ON ELECTRONIC VERSIONS OF DRAWINGS, SPECIFICATIONS, AND DATA FILES THAT ARE PROVIDED BY THE ENGINEER. FIELD VERIFY LOCATION OF PROJECT FEATURES.
- SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS, NOT ALL FEATURES ARE DETAILED ON EVERY PLAN. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET. ALL PLAN SHEETS WILL BE ON FILE AT THE CITY OF MANCHESTER. SEE OTHER PLAN SHEETS FOR RELATED NOTES AND ASSOCIATED INFORMATION.

DEMOLITION PLAN NOTES:

- THE PURPOSE OF THIS PLAN IS TO ILLUSTRATE AREAS AND LOCATIONS OF DEMOLITION RELATED TO THE PROPOSED PROJECT ON THE SUBJECT PARCEL AND WITHIN THE SURROUNDING CITY STREETS.
- 2. REMOVE AND DISPOSE OF EXISTING STUMPS AND UNSUITABLE MATERIAL IN ACCORDANCE WITH APPLICABLE NHDES STANDARDS.
- 3. REMOVE AND DISPOSE OF EXISTING UTILITIES, FOUNDATIONS, AND OTHER DEMOLITION DEBRIS IN ACCORDANCE
- WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND STATUTES. ALL GRANITE CURB SHALL BE SALVAGED TO THE CITY, UNLESS IT IS GOING TO BE REUSED ON SITE
- 5. NO CHANGES ARE PROPOSED OUTSIDE OF THE VISIBLE CONTENT PRESENTED ON THIS PLAN. SEE EXISTING CONDITIONS PLAN SHEET FOR AN OVERVIEW OF THE PROJECT AREA.
- ANY BUILDING TO BE REMOVED FROM THE SITE MUST HAVE A DEMOLITION PERMIT.
- 7. SEE OTHER PLAN SHEETS FOR RELATED NOTES AND ASSOCIATED INFORMATION.

EXISTING CONDITIONS NOTES:

- 1. THE PURPOSE OF THIS PLAN IS TO DEPICT EXISTING CONDITIONS OF THE SUBJECT PARCELS LOCATED ON TAX MAP 73 LOT 1, WITH A PHYSICAL ADDRESS OF 351 CHESTNUT STREET, MANCHESTER NH.
- 2. OWNER OF RECORD FOR TAX MAP 73 LOT 1 IS "351 CHESTNUT STREET, LLC". WITH A LEGAL ADDRESS OF 351 CHESTNUT STREET, MANCHESTER, NH 03101. DEED REFERENCE AT THE HCRD IS BOOK 8766 PAGE 2686.
- 3. PROPERTY LINE/BOUNDARY LINE INFORMATION IS BASED ON REFERENCE PLAN 1. FIELD SURVEY WAS PERFORMED
- BY THIS OFFICE IN APRIL OF 2021. PLAN IS CONTAINED WITHIN THIS PLAN SET. 4. HORIZONTAL DATUM IS NH STATE GRID/CITY OF MANCHESTER GIS NAD83/92. VERTICAL DATUM IS NAVD88
- EXISTING CONDITIONS AND TOPOGRAPHY IS BASED ON A COMBINATION OF ACTUAL GROUND SURVEY FROM REFERENCE PLAN #1 COLLECTED IN MARCH/APRIL OF 2021, AERIAL IMAGES, CITY OF MANCHESTER GIS MAPPING, AND ONLINE NOAA CONTOURS. OFFSITE INFORMATION OF RESIDENCES WAS SUPPLEMENTED WITH CITY OF MANCHESTER GIS INFORMATION. F&O DID NOT PERFORM FULL GROUND SURVEY. NO REPRESENTATION OR WARRANTY IS MADE AS TO NON-SURVEY FEATURES OF REFERENCE BY F&O.
- 6. PER THE CURRENT CITY OF MANCHESTER ZONING ORDINANCE; THE SUBJECT PROPERTY IS ZONED CENTRAL BUSINESS (CBD) DISTRICT ALONG WITH ALL ABUTTING PROPERTIES. ZONING REQUIREMENTS FOR THE CBD ZONING DISTRICT ARE AS FOLLOWS:

	REQUIRED:	EXISTING LOT:
MIN. LOT SIZE	N/A	0.713±AC/31,051±SF
MIN. LOT FRONTAGE	N/A	246.3'± (CHESTNUT)
MIN. FRONT SETBACK	N/A	4.35'±(CHESTNUT)
		78.4'± (MANCHESTER)
		20.2'± (MERRIMACK)
MIN. SIDE SETBACK	N/A	0' (BRIDGE/BREEZEWAY)
MIN. REAR SETBACK	N/A	N/A
MIN. LOT COVERAGE	N/A	95% (1,379SF)
MIN. BUILDING HEIGHT	N/A	<40'
MIN. BUILDING STORIES	N/A	3 STORIES
MAX. FLOOR AREA RATIO	5.0	<1.2

- THERE ARE NO ONSITE WETLANDS ON THE SUBJECT PARCEL (95% IMPERVIOUS)
- 8. THIS PROPERTY IS SERVICED BY PUBLIC WATER (MWW), SEWER (CITY OF MANCHESTER), AND ELECTRIC SYSTEM (EVERSOURCE).
- THE SUBJECT PARCEL OF LAND IS LOCATED IN ZONE X AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP(S) FIRM 33015C0315E, EFFECTIVE DATE: MAY 17, 2005. FLOOD ZONE X IS NOT A SPECIAL FLOOD HAZARD AREA, AND DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN.
- 10. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE SITE AND EXISTING CONDITIONS SURROUNDING IT AND THEREON.
- 11. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE LOCATION OF EXISTING FEATURES BOTH ABOVE GROUND AND BELOW, NO GUARANTEE IS MADE BY THIS OFFICE OR INDIVIDUALS OF LOCATION OF EXISTING FEATURES. UNDERGROUND UTILITIES ARE APPROXIMATE BASED ON REFERENCES LOCATED ON THE BOUNDARY PLAN.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT NEW HAMPSHIRE DIG SAFE, AT 1-888-DIG-SAFE, AT LEAST 72 HOURS BEFORE DIGGING.
- 13. IF ANY ERROR OR OMISSION IN THESE PLANS IS DISCOVERED BY THE CONTRACTOR, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD IMMEDIATELY IN WRITING FOR DIRECTION ON HOW TO PROCEED. THE CONTRACTOR SHALL DISCONTINUE WORK IN THE AFFECTED PROJECT AREA UNTIL AGREEMENT HAS BEEN REACHED WITH THIS FIRM ON CORRECTIVE ACTION.
- 14. SEE SEPARATE BORING LOGS FOR SUBSURFACE DATA/FINDINGS.
- 15. IF ANY ERROR OR OMISSION IN THESE PLANS IS DISCOVERED BY THE CONTRACTOR, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD IMMEDIATELY IN WRITING FOR DIRECTION ON HOW TO PROCEED. THE CONTRACTOR SHALL DISCONTINUE WORK IN THE AFFECTED PROJECT AREA UNTIL AGREEMENT HAS BEEN REACHED WITH THIS FIRM ON CORRECTIVE ACTION.
- 16. SOIL BOUNDARIES ARE SHOWN PER THE NRCS WEB SOILS SURVEY REPORT AND THE SITE IS COMPRISED OF ENTIRELY URBAN FILL/LAND:

SOIL NAME SOIL GROUP NRCS SYMBOL DRAINAGE CLASS

URBAN LAND N/A 17. NO SITE SPECIFIC SOIL SURVEY WAS PRODUCED DUE TO THE SITE BEING 95% IMPERVIOUS AS WELL AS PRESENCE OF URBAN FILL/LAND.

VARIANCE NOTE:

- THIS PROJECT RECEIVED A VARIANCE FROM THE ZONING BOARD OF ADJUSTMENT.
- CASE NUMBER ZBA2022-031, APPROVED
- •• VARIANCE GRANTED FROM 8.04 TO ALLOW 110 UNIT DENSITY
- •• VARIANCE GRANTED FROM 8.27(E) TO ALLOW REDUCED VIABILITY AT CORNERS

SITE PLAN NOTES:

- 1. THE PURPOSE OF THIS PLAN IS TO ILLUSTRATE PROPOSED SITE IMPROVEMENTS FOR THE CONSTRUCTION OF A FIVE STORY 127,700±SF FOOTPRINT, 98 UNIT MULTI-FAMILY RESIDENTIAL BUILDING, WITH PARKING GARAGE UNDER ON THE SUBJECT PARCEL LOCATED ON TAX MAP 73 LOT 1, WITH A PHYSICAL ADDRESS OF 351 CHESTNUT STREET, MANCHESTER NH.
- CHANGE OF OWNERSHIP OF THE LOT IS PROPOSED UPON SITE PLAN APPROVAL
- 3. PROPERTY LINE/BOUNDARY LINE INFORMATION IS BASED ON REFERENCE PLAN 1
- 4. PER THE CURRENT CITY OF MANCHESTER ZONING ORDINANCE; THE SUBJECT PROPERTY IS ZONED CENTRAL BUSINESS (CBD) DISTRICT ALONG WITH ALL ABUTTING PROPERTIES. ZONING REQUIREMENTS FOR THE CBD ZONING DISTRICT ARE AS FOLLOWS:

	REQUIRED:	EXISTING LOT:	PROPOSED LOT:
MIN. LOT SIZE	N/A	0.713±AC/31,051±SF	N/C (NO CHANGE)
MIN. LOT FRONTAGE	N/A	246.31' (CHESTNUT)	N/C'
MIN. FRONT SETBACK	N/A	4.35'±(CHESTNUT)	1.0'±(CHESTNUT)
		78.4'± (MANCHESTER)	11.4'±(MANCHESTER)
		20.2'± (MERRIMACK)	$1.0'\pm(MERRIMACK)$
MIN. SIDE SETBACK	N/A	0' (BRIDGE/BREEZEWAY)	15.2'±
MIN. REAR SETBACK	N/A	N/A	N/A
MAX. LOT COVERAGE	N/A	95% (1,379SF)	90% (3,07SF)
			(INCLUDING COURYARD)
			(NOT INCLUDING TREE-WELLS)
MAX. BUILDING HEIGHT	N/A	<40'	<70'
MAX. BUILDING STORIES	N/A	3 STORIES	6 STORIES
			(INCLUDING GARAGE UNDER)
MAX. FLOOR AREA RATIO	5.0	<1.2	4.1± (127,700SF±)
			(SEE AREAS ON GI-101)
MULTI-FAMILY DENSITY	SEE CALC	51 UNITS (SEE CALC)	98 UNITS (SEE CALC)
			(VARIANCE GRANTED)

5. MULTI-FAMILY DENSITY CALCULATION (PER ARTICLE 8.04)

MINIMUM LOT SIZE FOR FIRST THREE (3) UNITS = 3,000SF

MINIMUM ADDITIONAL LOT AREA AFTER FIRST THREE (3) UNITS = 500SF LOT SIZE = 31,051SF MINUS EASEMENTS = 27,091

FIRST THREE (LOTS) = 3,000SF = 27,091 - 3,000SF = 24,091SF EACH ADDITIONAL UNIT = 500SF = 24,091SF/500SF = 48.2 UNITS 3 UNITS + 48.2 UNITS = 51.2 UNITS PERMITTED BY ZONING ORDINANCE

DENSITY PERMITTED BY ZONING ORDINANCE

= 1 UNIT PER 606±SF DENSITY ALLOWED BY VARIANCE ZBA2021-070 GRANTED = UP TO 110 UNITS / 31,051SF LOT SIZE

= 1 UNIT PER 282±SF

DENSITY PROPOSED = 98 UNITS / 31,051SF LOT SIZE = 1 UNIT PER 317±SF

6. PARKING CALCULATIONS:

6.1. CBD ZONE DOES NOT HAVE PARKING REQUIREMENTS.

37-40 PARKING SPACES PROVIDED (2 ADA) IN THE PARKING GARAGE NOTE: PARKING COUNT IS CURRENTLY A RANGE, THE COUNT IS SUBJECT TO CHANGE UPON COMPLETION OF STRUCTURAL DESIGN OF PARKING GARAGE DUE TO COLUMN LAYOUT.

= 51.2 UNITS / 31,051SF LOT SIZE

- 7. ALL PLAN SHEETS WILL BE ON FILE AT THE CITY OF MANCHESTER PLANNING DEPARTMENT.
- 8. SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS, NOT ALL FEATURES ARE DETAILED ON EVERY PLAN. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET.
- 9. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT DEFICIENCIES EXIST IN THE APPROVED DRAWINGS, THE OWNER SHALL BE REQUIRED TO CORRECT THE DEFICIENCIES TO MEET THE REQUIREMENTS OF THE REGULATIONS AT NO EXPENSE TO THE CITY.
- 10. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE SITE AND EXISTING CONDITIONS SURROUNDING IT AND THEREON. THE CONTRACTOR SHALL ADVISE THE APPROPRIATE AUTHORITY OF HIS INTENTIONS AT LEAST 48 HOURS IN ADVANCE.
- 11. THE CONTRACTOR SHALL BID AND PERFORM THE WORK IN ACCORDANCE WILL ALL LOCAL, STATE AND NATIONAL CODES, SPECIFICATIONS, REGULATIONS, AND STANDARDS.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY FUSS & O'NEILL, INC. DO NOT EXTEND TO OR INCLUDE SYSTEM PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR OR ENGINEER HERE ON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEM THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEM WHICH MAY BE REQUIRED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL
- 13. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS, IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.
- 14. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY THEIR WORK AT ALL TIMES.
- 15. IF ANY ERROR OR OMISSION IN THESE PLANS IS DISCOVERED BY THE CONTRACTOR, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD IMMEDIATELY IN WRITING FOR DIRECTION ON HOW TO PROCEED. THE CONTRACTOR SHALL DISCONTINUE WORK IN THE AFFECTED PROJECT AREA UNTIL AGREEMENT HAS BEEN REACHED WITH THIS FIRM ON CORRECTIVE ACTION.
- 16. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE CITY OF MANCHESTER SITE PLAN REGULATIONS, CITY OF MANCHESTER DEPARTMENT OF PUBLIC WORKS STANDARD SPECIFICATIONS, AND THE LATEST EDITION OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. ALL CONSTRUCTION DETAILS SHALL BE IN ACCORDANCE WITH THE CITY OF
- 17. THE DRIVEWAY IS DESIGNED TO ACCOMMODATE THE CITY OF MANCHESTER EMERGENCY VEHICLE WB-50 TRUCK
- 18. SNOW SHALL NOT BLOCK SIGHT DISTANCES AND SHALL BE TRANSPORTED OFFSITE OR INTO OPEN AREAS IF NEEDED. OFFSITE TRANSPORT OF SNOW SHALL BE DONE SO IN ACCORDANCE WITH NHDES REGULATIONS.
- 19. FERTILIZER SHALL BE HANDLED IN ACCORDANCE WITH RSA 431:33 TO 35, OR AS AMENDED. SEE MANUAL OF BEST MANAGEMENT PRACTICES FOR AGRICULTURE IN NEW HAMPSHIRE AS PREPARED BY NEW HAMPSHIRE DEPARTMENT OF AGRICULTURE, AUGUST, 1993 OR AS AMENDED.
- 20. SITE SIGNAGE TO BE REVIEWED BY THE CITY PRIOR TO INSTALLATION. ANY PROPOSED SIGNAGE SHALL BE IN CONFORMANCE WITH THE ZONING ORDINANCE AND BROUGHT TO THE PLANNING BOARD AT A PUBLIC MEETING.
- 21. ALL WORK MUST CONFORM TO THE CITY OF MANCHESTER, DEPARTMENT OF WORKS STANDARD SPECIFICATIONS AND ANY WORK WITHIN THE CITY RIGHT OF WAY REQUIRES AN EXCAVATION PERMIT.
- 22. NO CERTIFICATE OF OCCUPANCY FOR THE NEW USES SHALL BE AUTHORIZED UNTIL ALL REQUIRED IMPROVEMENTS HAVE BEEN COMPLETED, UNLESS ADDRESSED BY THE PROVISION OF A FINANCIAL GUARANTEE, PURSUANT TO THE REQUIREMENTS OF SUBSECTION 4.14 OF THE MANCHESTER SUBDIVISION AND SITE PLAN REVIEW REGULATIONS.
- 23. CONDITIONAL APPROVAL OF THIS PLAN SHALL BE VALID FOR ONE YEAR, DURING WHICH TIME ALL CONDITIONS PRECEDENT TO FINAL APPROVAL SHALL BE COMPLETED AND PLANS SHALL BE SUBMITTED FOR FINAL APPROVAL;
- 24. ALL CONDITIONS SUBSEQUENT TO APPROVAL SHALL BE COMPLETED WITHIN TWO YEARS OF FINAL APPROVAL.
- 25. ALL STATE PERMITS WILL BE PROVIDED TO THE PLANNING DEPARTMENT UPON RECEIPT.
- 26. SEE OTHER PLAN SHEETS FOR RELATED NOTES AND ASSOCIATED INFORMATION.

- GRADING, DRAINAGE, AND EROSION CONTROL PLAN NOTES
- THE PURPOSE OF THIS PLAN IS TO ILLUSTRATE THE PROPOSED GRADING, DRAINAGE, STORMWATER MANAGEMENT, AND EROSION CONTROL SITE IMPROVEMENTS FOR THE SUBJECT PARCEL.
- 2. SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS, NOT ALL FEATURES ARE DETAILED ON EVERY PLAN. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET. ALL PLAN SHEETS WILL BE ON FILE AT THE CITY OF MANCHESTER.
- 3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE SITE AND EXISTING CONDITIONS SURROUNDING IT AND THEREON. THE CONTRACTOR SHALL ADVISE THE APPROPRIATE AUTHORITY OF THEIR INTENTIONS AT LEAST 48 HOURS IN ADVANCE.
- 4. THE CONTRACTOR SHALL VERIFY TEMPORARY BENCH MARKS (TBMS) IDENTIFIED ON REFERENCE PLANS PRIOR TO CONSTRUCTION AND NOTIFY THE CERTIFIED LAND SURVEYOR OR ANY DISCREPANCIES.
- 5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE LOCATION OF EXISTING FEATURES BOTH ABOVE GROUND AND BELOW, NO GUARANTEE IS MADE BY THIS OFFICE OR INDIVIDUALS OF LOCATION OF EXISTING FEATURES. UNDERGROUND UTILITIES ARE APPROXIMATE BASED ON REFERENCES LOCATED ON THE COVER SHEET.
- 6. ALL DRAINAGE STRUCTURES IN PAVEMENT SHALL HAVE RIMS SET TO FINISH GRADE REGARDLESS OF ANY ELEVATIONS OTHERWISE SHOWN.
- 7. DRAINAGE PIPE LENGTHS NOTED ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.
- 8. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
- 9. INSTALL UNDERDRAIN IN ALL CUT SECTIONS. CONNECT TO CATCH BASINS.
- 10. FLUSH CLEAN AND REMOVE ALL DEBRIS OF EXISTING AND PROPOSED CULVERTS DURING AND POST
- 11. INSPECT EXISTING CONDITION OF ALL PIPES/CULVERTS/HEADWALLS DURING CONSTRUCTION, REPLACE AS
- 12. REMOVE ALL UNSUITABLE MATERIALS ENCOUNTERED DURING EXCAVATIONS AND REPLACE WITH SUITABLE FILL CONTRACTOR TO COORDINATE ADDITIONAL TEST BORINGS, TEST PITS, AND COORDINATE WITH A GEOTECHNICAL
- 13. IF LEDGE IS DISCOVERED DURING EXCAVATION, REMOVE LEDGE A MINIMUM OF TWO (2) FEET BELOW GRAVELS AND REPLACE WITH SUITABLE MATERIAL. COORDINATE WITH ARCHITECT OR GEOTECHNICAL ENGINEER.
- 14. CONTRACTORS LOAM AND SEED ALL DISTURBED AREAS PER DETAIL LOCATED WITHIN THIS PLAN SET.
- 15. PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY, A WRITTEN CERTIFICATION FROM THE LICENSED ENGINEER SHALL BE PROVIDED TO STAFF STATING THAT THE PROJECT HAS BEEN COMPLETED IN CONFORMANCE
- 16. ALL DRAINAGE IMPROVEMENTS SPECIFIED ON THESE SITE PLANS SHALL BE CONSTRUCTED, COMPLETED, INSPECTED, AND APPROVED BY THE CITY PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY, WHERE APPLICABLE. ALL STORMWATER STRUCTURES SHALL BE INSPECTED AND CLEANED FOLLOWING SITE STABILIZATION AND PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY, WHERE APPLICABLE. A REPORT INCLUDING THE INSPECTION FINDINGS AND CLEANING ACTIVITIES SHALL BE SUBMITTED TO DPW.
- 17. SEE OTHER PLAN SHEETS FOR RELATED NOTES AND ASSOCIATED INFORMATION. REFER TO EROSION CONTROL NOTES ON PLAN SHEET GI-101.

LIGHTING PLAN NOTES:

- 1. THE PURPOSE OF THIS PLAN IS TO SHOW PROPOSED LIGHTING FOR THE SUBJECT PROPERTY. THIS ANALYSIS WAS
- PERFORMED AND PROVIDED BY KEN SWEENEY CHARRON INC. 603-624-4827, KSWEENEY@CHARRONINC.COM 2. THE PROFESSIONAL ENGINEER ENDORSEMENT BY F&O ON THIS SHEET DOES NOT INCLUDE DESIGN ENDORSEMENT OF THIS DETAILED INFORMATION. CONTACT CHARRON INC. FOR ADDITIONAL INFORMATION.
- 3. ALL SITE LIGHTING IS TO COMPLY WITH ALL PROVISIONS OUTLINED WITHIN THE CITY OF MANCHESTER REGULATIONS.
- 4. LIGHTING CONDUIT DESIGNED BY OTHERS.
- SEE DETAIL SHEETS FOR LIGHTING DETAILS.

BUILDING AND UTILITY PLAN NOTES:

REQUIRES UPGRADE.

- 1. UTILITY LOCATIONS AS SHOWN ON THESE PLANS HAVE BEEN OBTAINED FROM VARIOUS SOURCES AND THEIR LOCATIONS ARE ONLY APPROXIMATE. BEFORE ANY CONSTRUCTION ACTIVITY BEGINS, THE CONTRACTOR SHALL CONTACT DIG-SAFE AT 1-888-DIG-SAFE AND FIELD VERIFY ALL UTILITY LOCATIONS.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND FLEVATION OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING IF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION SHALL BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT NEW HAMPSHIRE DIG SAFE, AT 1-888-DIG-SAFE, AT LEAST 72 HOURS BEFORE DIGGING.
- 3. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.
- 4. THE CONTRACTOR SHALL COORDINATE MATERIALS AND INSTALLATION SPECIFICATIONS WITH THE INDIVIDUAL UTILITY AGENCIES/COMPANIES, AND ARRANGE FOR ALL INSPECTIONS.
- 5. INSTALLATION OF ALL UTILITIES SHALL BE UNDERGROUND.

COVER, AND ABOVE WATER LINE IN ANY AREAS WITH LESS THAN 5.5' COVER (TYP)

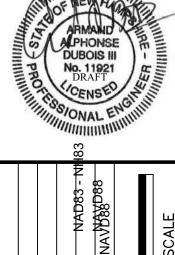
6. MEP TO CONFIRM EXISTING ONSITE ELECTRIC SUPPLY IS SUFFICIENT FOR PROPOSED USES. IF UPGRADES ARE REQUIRED, MEP SHALL DESIGN AND COORDINATION WITH EVERSOURCE. 7. COORDINATE WITH ELECTRIC UTILITY COMPANY FOR FINAL ELECTRICAL LAYOUT.

8. INSTALL 2" THICK X 5' WIDE BLUEBOARD INSULATION ABOVE SEWER LINE IN ANY AREAS WITH LESS THAN 6'

- 9. PRIOR TO THE DATE OF APPROVAL OF THESE DESIGN PLANS; FINAL MECHANICAL, ELECTRICAL, PLUMBING (MEP), AND ARCHITECTURAL PLANS WERE NOT PROVIDED TO THE DESIGN ENGINEER. PRIOR TO CONSTRUCTION THE MEP CONTRACTORS AND ARCHITECTS ARE REQUIRED TO REVIEW, APPROVE, AND/OR AMEND ALL MEP AND ARCHITECTURAL DESIGN WITHIN THE BUILDINGS OR UPON THE SITE. INCLUDING BUT NOT LIMITED TO SIZES, MATERIALS, ELEVATIONS, AND OVERALL DESIGN. COORDINATE WITH THE MUNICIPALITY AND DESIGN ENGINEER FOR ALL PLAN REVISIONS.
- 10. A MINIMUM 10' HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL WATER AND SEWER UTILITIES. AT MAIN AND SERVICE CROSSINGS WHERE 10' HORIZONTAL SEPARATION IS NOT POSSIBLE, AN 18" VERTICAL CLEARANCE SHALL BE PROVIDED WITH WATER OVER SEWER.
- 11. EXTERNAL FIRE LANES ARE NON DEMARCATED AND PARKING SPACES ARE ILLUSTRATED UPON THE PLAN.
- 12. PLANS WILL REQUIRE A STATE OF NH LICENSED ARCHITECT AND/OR PROFESSIONAL ENGINEERS STAMP. THE PLAN REVIEW MAY INCLUDE BOTH BUILDING FIRE SAFETY REQUIREMENTS ON THE SAME PLAN. 13. ANY FUTURE PROPOSED CHANGE OF USE WILL REQUIRE AN AMENDED SITE PLAN TO BE SUBMITTED TO THE
- PLANNING BOARD OFFICE. A REVIEW OF THE SITE PLAN WILL BE CONDUCTED BY THE PLANNING BOARD. 14. INSTALL A FIRE SUPPRESSION SYSTEM DOUBLE CHECK VALVE ASSEMBLY FOR BACKFLOW PREVENTION. FIRE SUPPRESSION PLANS TO BE REVIEWED/APPROVED BY MANCHESTER WATER WORKS PRIOR TO IN CONSTRUCTION. A PLUMBING PLAN AND PLUMBING FIXTURE SUMMARY SHALL BE SUBMITTED TO MANCHESTER WATER WORKS TO CALCULATE THE SIZE OF THE WATER METER SO AS TO DETERMINE IF THE EXISTING METER IS SUFFICIENT OR
- 15. FIRE PROTECTION WATER SUPPLIES MUST BE IN PLACE PRIOR TO ERECTION OF ANY STRUCTURE.
- 16. COORDINATE WITH THE CITY TO PROVIDE A PERFORMANCE GUARANTEE, TO SERVE AS A FINANCIAL SURETY IN THE EVENT OF ABANDONMENT, INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROLS THROUGHOUT THE CONSTRUCTION PERIOD, AND FULL AND FINAL COMPLETION OF PUBLIC IMPROVEMENTS.
- 17. ALL RETAINING WALLS SHALL HAVE DESIGN DRAWINGS STAMPED BY A STATE OF NH LICENSED PROFESSIONAL STRUCTURAL ENGINEER, AND SUBMITTED TO THE CITY FOR REVIEW.
- 18. CONTRACTOR TO CREATE TRAFFIC CONTROL PLAN FOR REVIEW AND APPROVAL WITH THE CITY PRIOR TO START OF

19. SEE OTHER PLAN SHEETS FOR RELATED NOTES AND ASSOCIATED INFORMATION.

ALPHONSE DUBOIS III No. 11921 DRAFT CENSE



NOTES 1 EE LOT STRJ NEW

PROJ. No.: 20211191.A10

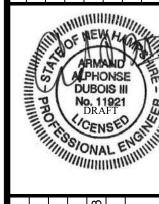
GI-1(

DATE: MAY 2022

CONDITIONS PENDING PLANNING BOARD MEETING AND CITY REVIEW

AS-BUILT NOTES:

- 1. SINCE A STORMWATER LONG TERM MAINTENACE AGREEMENT (LTMA) WILL NOT BE REQUIRED FOR THE PROPOSED DRAINAGE SYSTEM, AS-BUILT CONDITIONS OF THE COMPLETED DRAINAGE SYSTEM MUST BE DOCUMENTED FOR CITY RECORDS AND TO MEET THE MOST RECENT NH 2017 MS4 REQUIREMENTS. AS FINAL APPROVAL OF THE PROPOSED DRAINAGE PLAN, THE APPLICANT SHALL SUBMIT A COMPLETE AS-BUILT CONDITIONS AND MYLAR PLAN SET TO BE KEPT ON FILE WITH THE DEPARTMENT OF PUBLIC WORKS:
 - a. APPLICANTS SUBMITTING AS-BUILT MYLARS TO THE DPW SHALL ALSO SUBMIT A CD- ROM THAT CONTAINS A DIGITAL FILE WITH ALL FEATURES SHOWN ON THE MYLARS.
 - b. THE PREFERRED FILE FORMAT FOR SUBMISSION IS THE AUTOCAD DRAWING (.DWG) FORMAT, HOWEVER, ANY OF THE FOLLOWING OTHER FORMATS ARE ACCEPTABLE: .DXF (DRAWING EXCHANGE FILE) FORMAT, ESRI GEODATABASE FORMAT (.MDB), ESRI EXPORT FILE FORMAT (.E00), OR ARCVIEW SHAPEFILE FORMAT (.SHP).
 - c. EACH TYPE OF FEATURE ON THE DIGITAL FILE SHALL BE ON A SEPARATE LAYER, SUCH AS ONE LAYER FOR PARCEL BOUNDARIES, ONE LAYER FOR DRAINAGE, ONE LAYER FOR SEWER, AND ONE LAYER FOR CURBS.
 - d. DATUMS FOR ALL DIGITAL FILES SUBMITTED SHALL BE NAD 83/92 (HARN) FOR THE HORIZONTAL DATUM (NOT NAD 83), AND NAVD 88 FOR THE VERTICAL DATUM. THE COORDINATES OF ALL STORMWATER INFRASTRUCTURE ELEMENTS (E.G., CATCH BASINS, MANHOLES, MANAGEMENT SYSTEMS, PIPING) SHALL BE INCLUDED IN THE DIGITAL FILES.



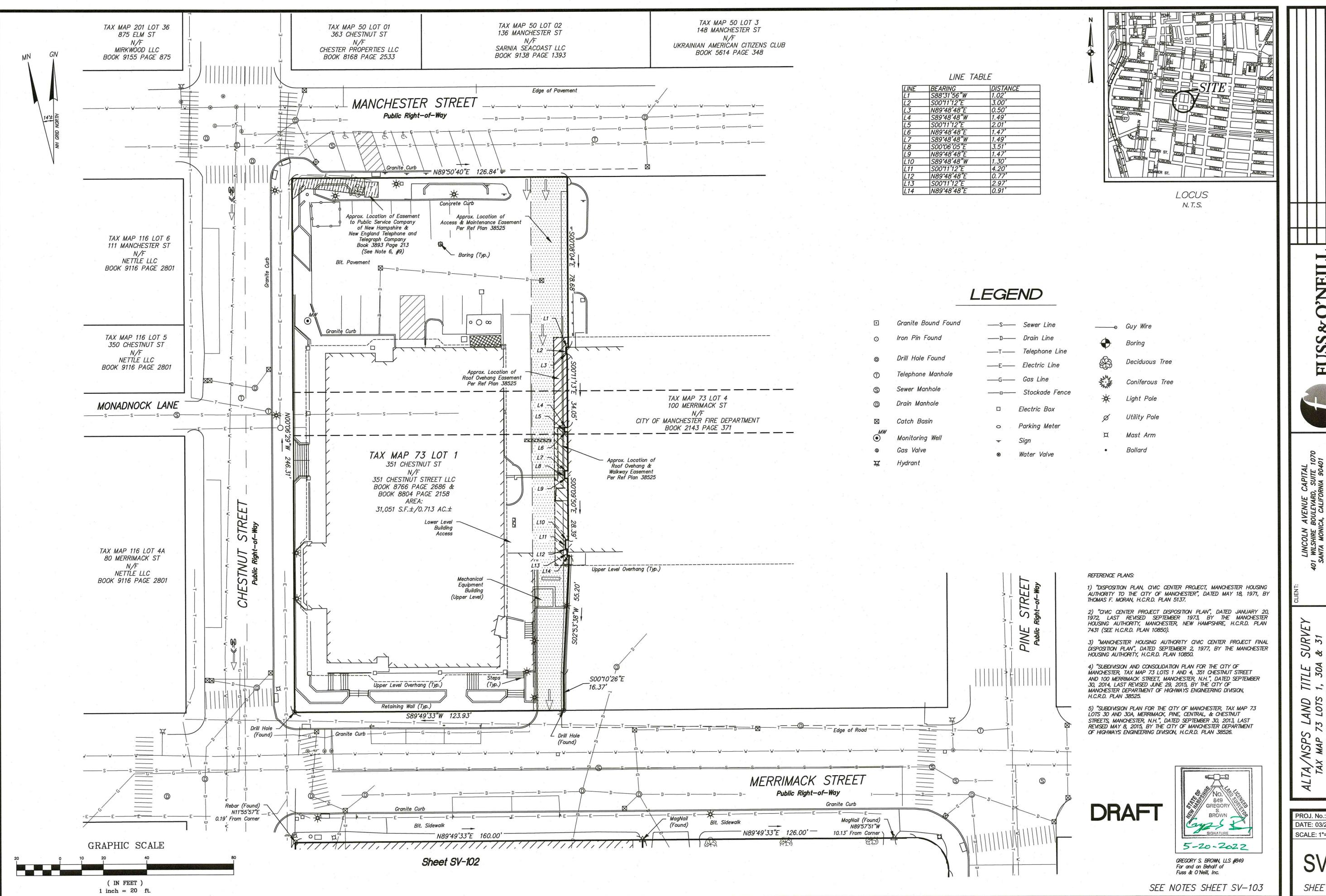
HOB7 ·		VERT.:		HORZ.: NAD83 - NH83	:RT.: NAVD88	
HOH	2	VER	DATUM:	HOF	:.VERT.:	



RESIDENCES AT CHESTNUT BUILDING 1 GENERAL NOTES TAX MAP 73 LOT 1 351 CHESTNUT STREET STER NEW H.

PROJ. No.: 20211191.A10 DATE: MAY 2022

GI-103



PROJ. No.: 20211191.A10 DATE: 03/25/2022 SCALE: 1"=20'

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TITLE COMMITMENT DESCRIPTIONS

Three tracts or parcels of land, with the structures thereon, located in Manchester, County of Hillsborough, State of NewHampshire more particularly described as follows:

Parcel I

A certain tract or parcel of land located in Manchester, County of Hillsborough, State of New Hampshire more particularly described as follows:

Beginning at a drill hole set at the northwest corner of the parcel herein described, said point being the intersection of the easterly sideline of Chestnut Street with the southerly sideline of Manchester Street; thence,

N89°49'48"E along the said line of Manchester Street 126.84' to a magnetic nail set; thence,

S00°08'56"E 78.68' in line with and by the westerly face of a concrete retaining wall the northerly face of supporting column A; thence,

S88'31'04"W 1.02' by the northerly face of supporting column A to the westerly face of said column A; thence,

S00°12'04"E 3.00' by the westerly face of supporting column A to the southerly face of said column A; thence,

N89°47'56"E 0.50' by the southerly face of supporting column A to the westerly face of the foundation wall of the exiting fire station; thence,

S00°12'05"E 34.05' by the westerly face of the foundation wall of the exiting fire station to the northerly face of support column B; thence,

S89°47'56"W 1.49' by the northerly face of support column B to the westerly face of support column B; thence,

S00°12'04"E 2.01' by the westerly face of supporting column B to the southerly face of said column B; thence,

N89°47′56″E 1.47′ by the southerly face of supporting column B to the westerly face of the foundation wall of the exiting fire station; thence,

S00°10'17"E 17.94' by the westerly face of the foundation wall of the exiting

fire station to the northerly face of support column C; thence,

S89°47'56"W 1.49' by the northerly face of supporting column C to the westerly face of said column C; thence,

S00°06'57"E 3.51 by the westerly face of supporting column C to the southerly face of said column C; thence,

N89°47′56″E 1.47′ by the southerly face of supporting column C to the westerly face of the foundation wall of the exiting fire station; thence, S00°10′42″E 28.39′ by the westerly face of the foundation wall of the

exiting fire station to the northerly face of support column D; thence,

The following courses and distances by the northerly, westerly and

southerly faces of support column D;

S89°47′56″W 1.30′;

S00°12'04"E 4.20';

N89°47'56"E 0.77';

S00°12'04"E 2.97';

N89°47'56"E 0.91' to a point at the westerly face of a concrete retaining wall;

S02°52'46"W along said westerly face of concrete retaining wall 55.20' to a point; thence,

Continuing along said retaining wall face S00°11'18"E 16.37' to a drill hole in the northerly line of Merrimack Street; thence,

S89*48'39"W along said line of Merrimack Street 123.93' to a drill hole at the point of intersection of said line of Merrimack Street with the said easterly line of Chestnut Street; thence,

Along said line of Chestnut Street N00°07'21"W 246.31' to the point of

TITLE COMMITMENT DESCRIPTIONS continued

Parcel II

A certain tract or parcel of land located in Manchester, County of Hillsborough, State of New Hampshire more particularly described as follows:

Beginning at a Mag Nail set at the northwest corner of the parcel herein described, said point being on the southerly sideline of Merrimack Street and 160.00' west of the easterly sideline of Chestnut Street; thence,

N89°48'41"E along the said line of Merrimack Street 116.00' to a Mag Nail set; thence,

Continuing along the said line of Merrimack Street N89°48'41"E 10.00' to

On a tangent curve to the right with a radius of 15.00' an arc length 23.57' to a Mag Nail set at the westerly sideline of Pine street; thence,

S00°10'11"E along the said line of Pine Street 75.40' to a Mag Nail set; thence.

S89°52'46"W 141.08' along a new line and the northerly line of parcel shown as Map 73 Lot 30 to a point; thence,

N00°07'21"W 90.24' by the easterly line of parcel shown as Map 73 Lot 30A to the point of beginning.

Parcel III

A certain tract or parcel of land located in Manchester, County of Hillsborough, State of New Hampshire more particularly described as follows:

Beginning at a 1" iron rod with cap set at the northwest corner of the parcel herein described, said point being the intersection of the southerly sideline of Merrimack Street and the easterly sideline of Chestnut Street; thence.

N89°48'41"E along the said line of Merrimack Street 160.00' to a Mag Nail set; thence,

S00°07'21"E 90.24' by a new line and along the westerly line of parcel shown as Map 73 Lot 30–1 to a point in the northerly line of land of the United States of America; thence,

S89°52'46"W 160.00' along the said line of the United State of America to a drill hole set at the easterly sideline of Chestnut Street; thence,

N00°07'21"W along the said line of Chestnut Street 90.05' to the point of beginning.

NOTES:

1) THIS SURVEY HAS BEEN PREPARED IN CONNECTION WITH FIRST AMERICAN TITLE INSURANCE COMPANY COMMITMENT FILE NUMBER 2022-2 DATED FEBRUARY 1, 2022.

2) THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY PERFORMED ON THE GROUND DURING

3) BASIS OF BEARING IS NH GRID NORTH. VERTICAL DATUM IS NAVD88. HORIZONTAL DATUM IS NAD83(92).

4) THE SUBJECT PROPERTY IS LOCATED IN THE (CBD) CENTRAL BUSINESS DISTRICT ZONING DISTRICT PER THE CITY OF MANCHESTER ZONING ORDINANCE AS LAST AMENDED SEPTEMBER 7, 2001. THERE ARE NO MINIMUM BUILDING SETBACKS IN SAID ZONE. FINAL INTERPRETATION AND DETERMINATION IS MADE BY THE CITY OF MANCHESTER ZONING OFFICIALS.

5) SUBJECT PREMISES IS LOCATED IN ZONE X AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP FIRM 33011C0377D , EFFECTIVE DATE: SEPTEMBER 25, 2009. FLOOD ZONE X IS NOT A SPECIAL FLOOD HAZARD AREA.

6) THE SUBJECT PREMISES IS SUBJECT TO THE FOLLOWING EXCEPTIONS RECORDED AT THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS LISTED IN AND KEYED TO SCHEDULE B — SECTION 2 OF THE ABOVE REFERENCED TITLE COMMITMENT AT NOTE 1:

#7. ALL FACTS, NOTATIONS, EASEMENTS, AND OTHER MATTERS DEPICTED ON THE FOLLOWING PLANS RECORDED AT THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS:

a. "SUBDIVISION AND CONSOLIDATION PLAN FOR CITY OF MANCHESTER TAX MAP 73 LOTS 1 AND 4, 351 CHESTNUT STREET AND 100 MERRIMACK STREET, MANCHESTER N.H." DATED 9/30/2014, REVISED 6/29/2015, RECORDED IN THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NO. 38525.

b. "SUBDIVISION PLAN FOR CITY OF MANCHESTER TAX MAP 73, LOTS 30 AND 30A.

MERRIMACK, CENTRAL & CHESTNUT STREETS, MANCHESTER, NH" DATED SEPTEMBER 30, 2013

AND RECORDED IN THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NO. 38526.

#8. DEED RESTRICTIONS CONTAINED IN DEED OF CITY OF MANCHESTER TO 351 CHESTNUT STREET, LLC DATED JUNE 30, 2015 AND RECORDED IN THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS AT BOOK 8766. PAGE 2686. INCLUDING:

a. DRIVEWAY AND RAMP EASEMENT OVER A PORTION OF PARCEL I FOR THE USE OF THE DRIVEWAY AND DRIVEWAY RAMPS FOR ALL DRIVEWAY PURPOSES, INCLUDING BUT NOT LIMITED TO VEHICULAR AND PEDESTRIAN ACCESS AND HANDICAP ACCESS TO AND DELIVERIES OF ANY NATURE OR TYPE TO THE FIRE STATION LAND AND BUILDING LOCATED TO THE EAST OF PARCEL I, WHICH EASEMENT SHALL RUN WITH THE LAND;

b. ROOF ENCROACHMENT EASEMENT NO. 1 TO MAINTAIN, REPAIR, REBUILD, REPLACE, CONSTRUCT AND RECONSTRUCT THE WALLS AND RETAINING WALLS OF THE FIRE STATION BUILDING:

C. ROOF ENCROACHMENT EASEMENT NO. 2 OVER PARCEL I FOR THE ROOF OVERHANG, WALKWAY, STAIRS AND FOOTINGS SERVICING OR ARE PART OF THE EXISTING FIRE STATION AND FOR INGRESS AND EGRESS TO OR FROM THE EXISTING FIRE STATION BUILDING USING SAID STAIRS AND WALKWAY;

d. AN ADDITIONAL EASEMENT OVER PARCEL I FOR THE ROOF OVERHANG AND FOOTINGS OF THE EXISTING FIRE STATION;

e. FUEL TANK AND ACCESS EASEMENT OVER PARCEL III RECORDED IN THE SAID REGISTRY AT BOOK 2598, PAGE 454;

f. ACCESS, PARKING AND UTILITY EASEMENT OVER PARCEL III, AND RESTRICTION REGARDING CONSTRUCTION OF PARKING GARAGE, OVER A PORTION OF PARCEL III SHOWN ON PLAN NO. 38526.

#9. EASEMENT TO PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE AND NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY DATED NOVEMBER 23, 1986 AND RECORDED WITH THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS AT BOOK 3893, PAGE 214.

#10. NOTICE OF GROUNDWATER MANAGEMENT PERMIT DATED JULY 13, 2004 AND RECORDED WITH THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS AT BOOK 7287, PAGE 1661.

7) IN ADDITION, THE SUBJECT PREMISES MAY BE SUBJECT TO AND/OR WITH THE BENEFIT OF THE FOLLOWING:

a) EXCEPTING ANY EXISTING RIGHTS, RESTRICTIONS OR RESERVATIONS AS REFERRED TO IN A DEED FROM MARION C. SMYTH TO THE CITY OF MANCHESTER, DATED JUNE 20, 1914, HILLSBOROUGH COUNTY REGISTRY OF DEEDS BOOK 722 PAGE 447.

b) RESTRICTIONS CONTAINED IN DEED FROM THE MANCHESTER HOUSING AUTHORITY TO THE CITY OF MANCHESTER DATED NOVEMBER 18, 1975, HILLSBOROUGH COUNTY REGISTRY OF DEEDS BOOK 2435 PAGE 764, AS AFFECTED BY CORRECTIVE DEED FROM THE MANCHESTER HOUSING AUTHORITY TO THE CITY OF MANCHESTER DATED MARCH 21, 1978, HILLSBOROUGH COUNTY REGISTRY OF DEEDS BOOK 2598 PAGE 451.

c) RESTRICTIONS CONTAINED IN DEED FROM THE MANCHESTER HOUSING AUTHORITY TO THE CITY OF MANCHESTER DATED MARCH 21, 1978, HILLSBOROUGH COUNTY REGISTRY OF DEEDS BOOK 2598 PAGE 454.

8) UTILITY STRUCTURES AT OR ABOVE THE GROUND SURFACE SHOWN HEREON ARE THOSE THAT HAVE BEEN OBSERVED FROM SURFACE EVIDENCE. UTILITIES BENEATH THE GROUND SURFACE HAVE NOT BEEN OBSERVED AND ARE SHOWN APPROXIMATELY HEREON AS DERIVED FROM A COMBINATION OF SURFACE MARKINGS BY OTHERS AND/OR RECORD INFORMATION AND ARE NOT VERIFIED LOCATIONS OR CONFIRMATION OF EXISTENCE OF SAID UNDERGROUND UTILITIES. ALL UNDERGROUND UTILITIES SHOULD BE LOCATED IN THE FIELD PRIOR TO COMMENCEMENT OF ALL SITE WORK. CALL DIG SAFE 1—888—344—7233 A MINIMUM OF 72 HOURS PRIOR TO PLANNED ACTIVITY.

ALTA CERTIFICATION

TO LINCOLN CAPITAL ACQUISITION, LLC AND THEIR SUCCESSORS AND ASSIGNS; FIRST AMERICAN TITLE INSURANCE COMPANY:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1,2,3,4,6(a)(b),7(a),8,9,13,16, AND 18 OF TABLE A

DATE OF MAP OR PLAT: MARCH 25, 2022.

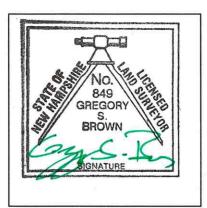
NH CERTIFICATION:

I HEREBY CERTIFY THAT THIS PLAN IS BASED ON AN ACTUAL GROUND SURVEY PERFORMED BY THIS OFFICE AND THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, SAID SURVEY MEETS OR EXCEEDS THE MINIMUM PRECISION AND/OR ACCURACY REQUIREMENTS FOR SURVEY CLASSIFICATION "U" AS SET FORTH IN TABLE 500.1 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS, EFFECTIVE 11/1/16.

THEREOF. THE FIELD WORK WAS COMPLETED ON MARCH 25, 2022.

DATE: 5-20-2022

DRAFT



GREGORY S. BROWN, LLS #849 For and on Behalf of Fuss & O'Neill, Inc. DATE REVISION

FUSS & O'NEIL

50 COMMERCIAL STREET

MANCHESTER, NEW HAMPSHIRE 0310
603.668.8223



TNUT STREET, LLC P.O. BOX W HAMPSHIRE 03034

ER: 351 CHESTNUT
P.O. E

DEED HOLDER:

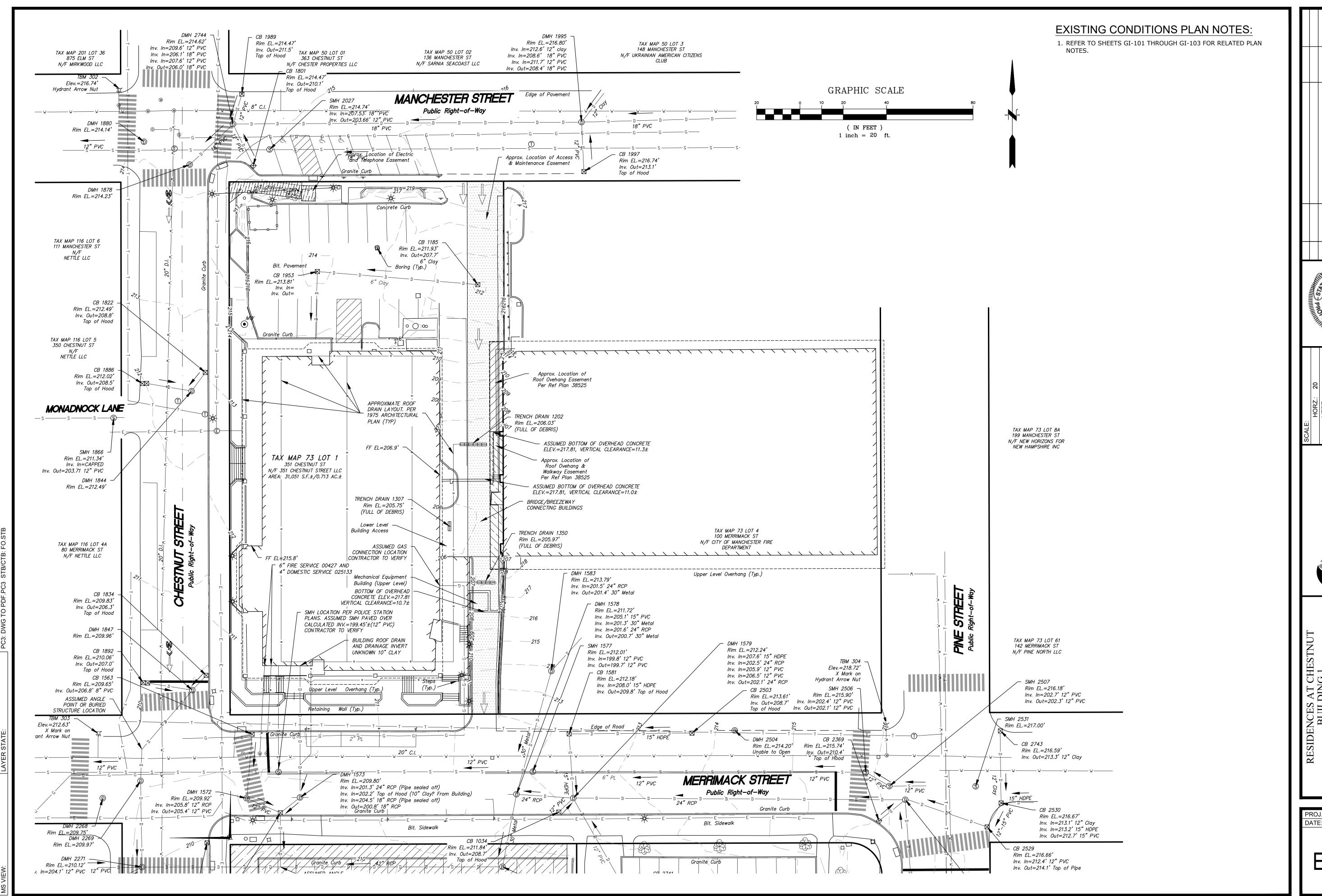
4/NSPS LAND TITLE SUR AX MAP 73 LOTS 1, 30A & 31 351 CHESTNUT STREET, MERRIMACK & PINE STREETS MANCHESTER, NEW HAMPSHIRE

PROJ. No.: 20211191.A10 DATE: 03/25/2022

SCALE: 1"=20'

SV-103

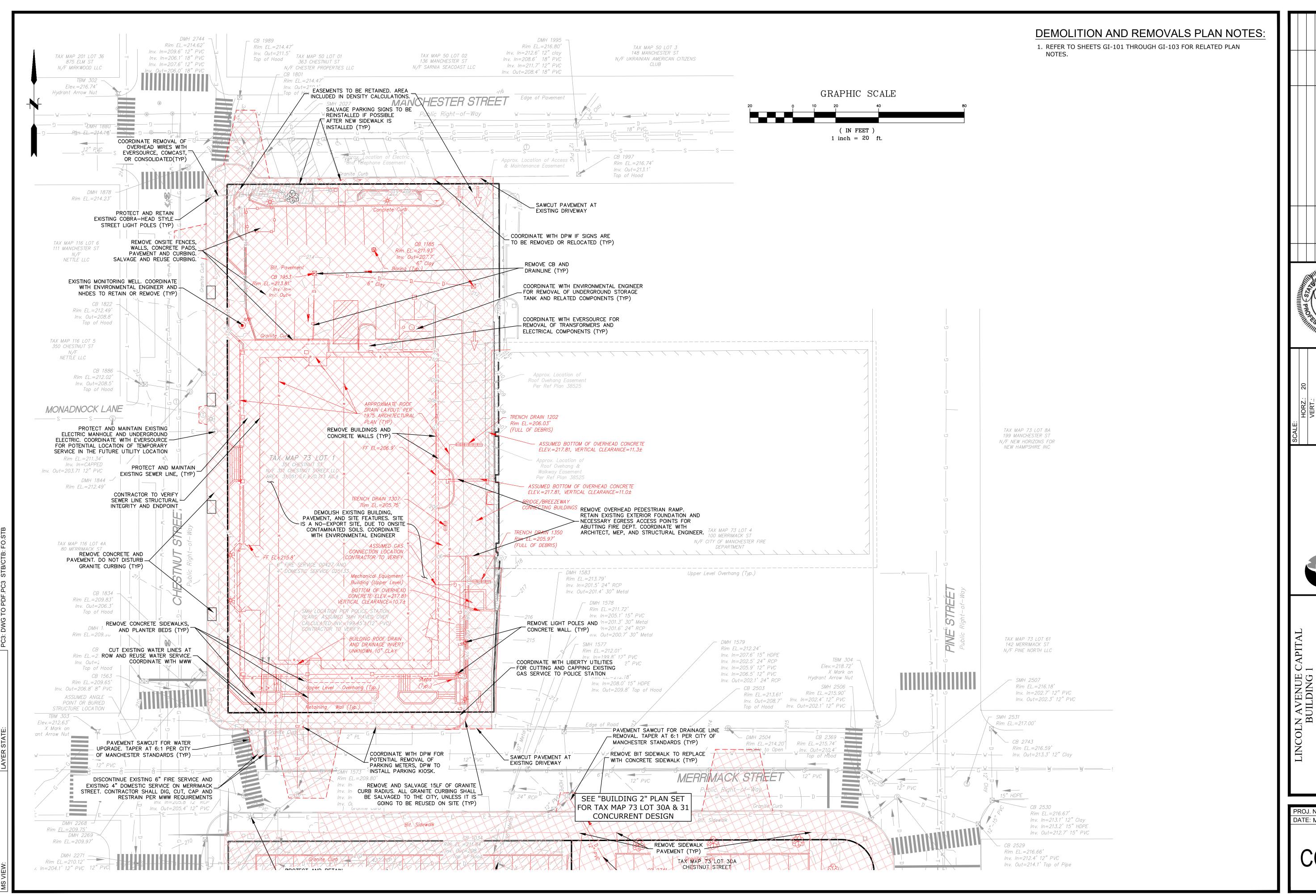
SHEET 3 OF 3



ALPHONSE DUBOIS III

PROJ. No.: 20211191.A10 DATE: MAY 2022

EX-101

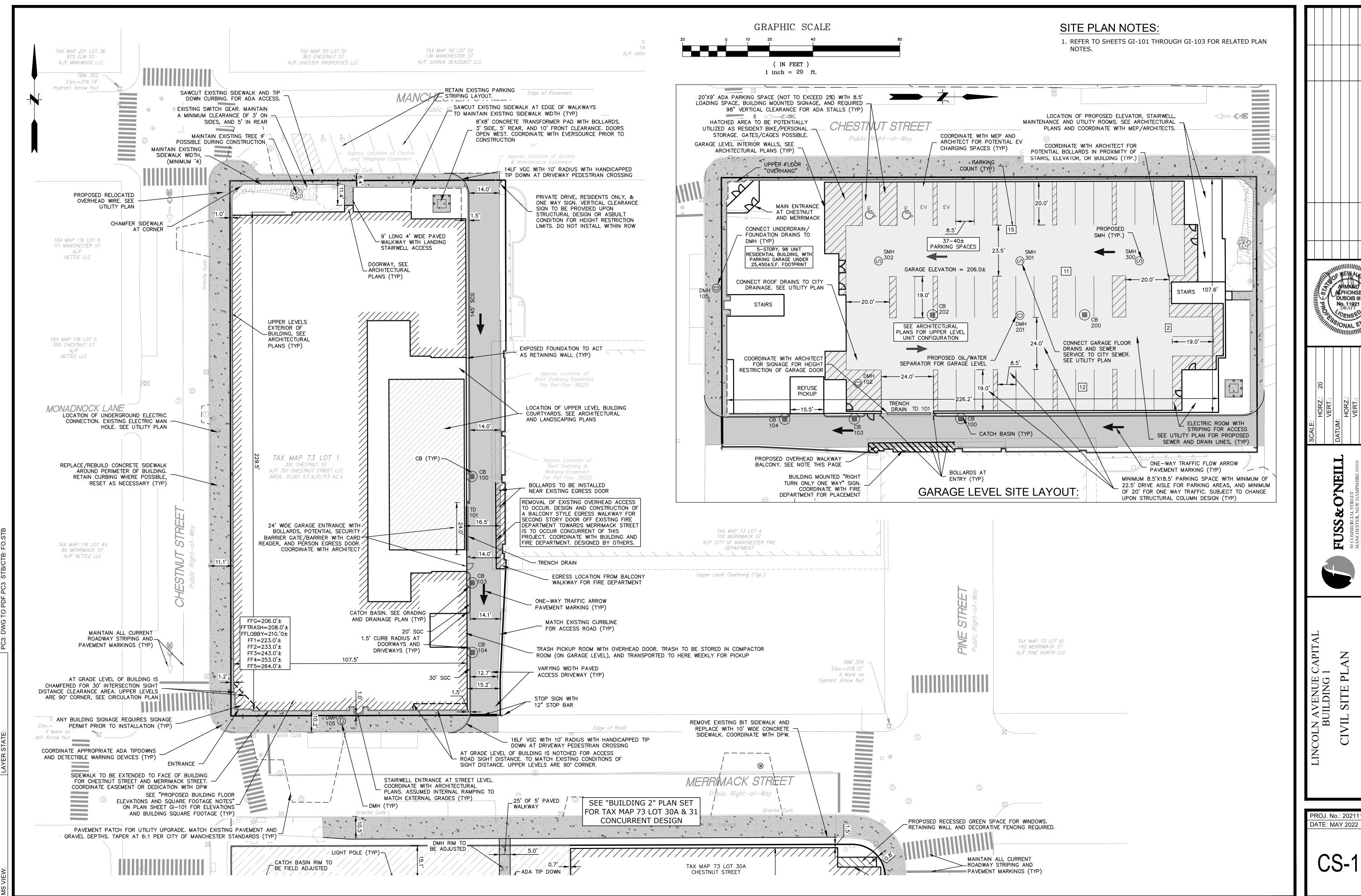


APHONSE DUBOIS III

BUILDING 1
CIVIL DEMOLITION AND
REMOVALS PLAN
TAX MAP 73 LOT 1
351 CHESTNIJT STREET

PROJ. No.: 20211191.A10 DATE: MAY 2022

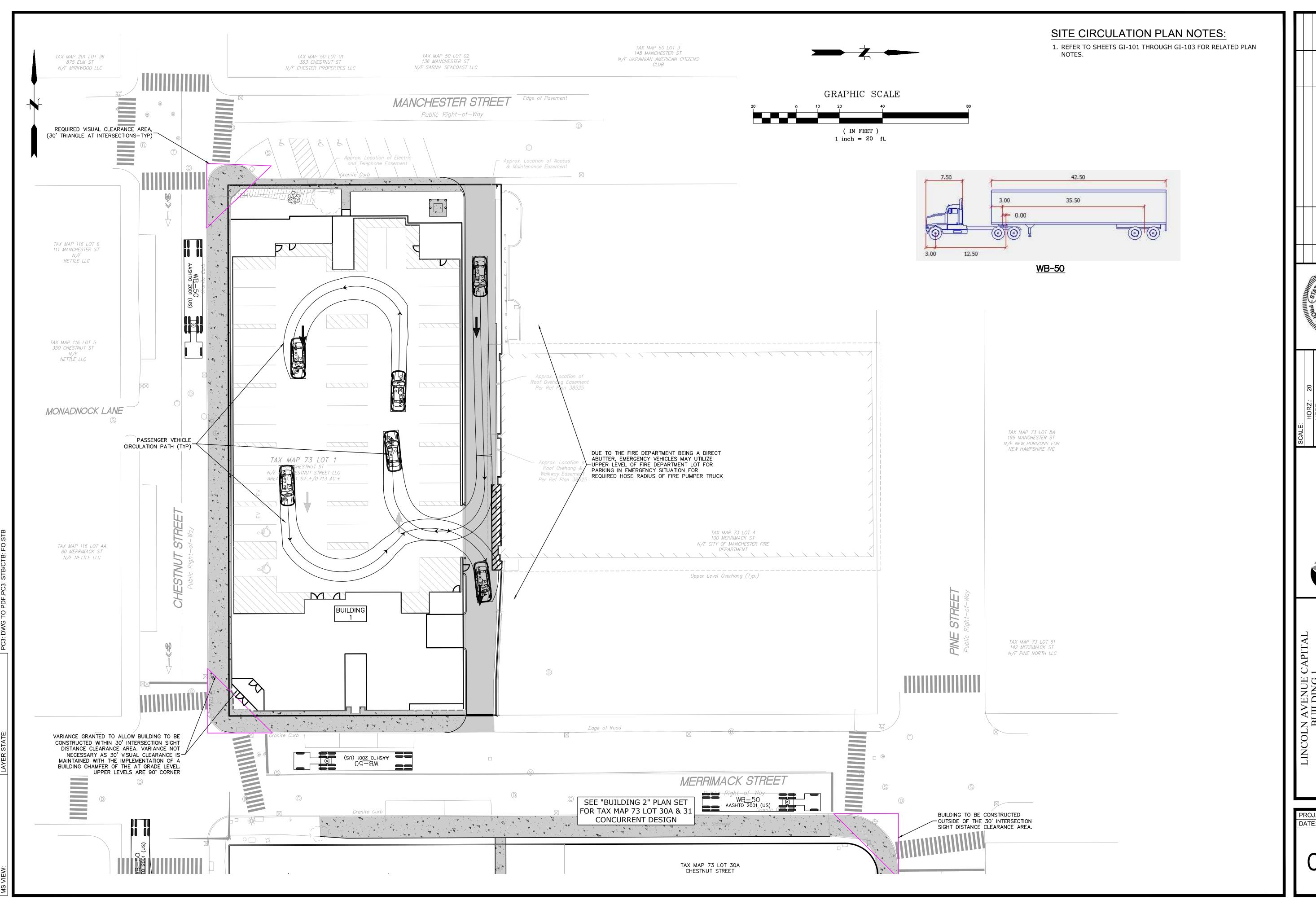
CC-101



ALPHONSE DUBOIS III No. 11921 N AVENUE BUILDING

PROJ. No.: 20211191.A10

CS-101



&O'NEILL

BUILDING 1
IVIL TRAFFIC
CULATION PLAN
AX MAP 73 LOT 1

PROJ. No.: 20211191.A10 DATE: MAY 2022

CT-101





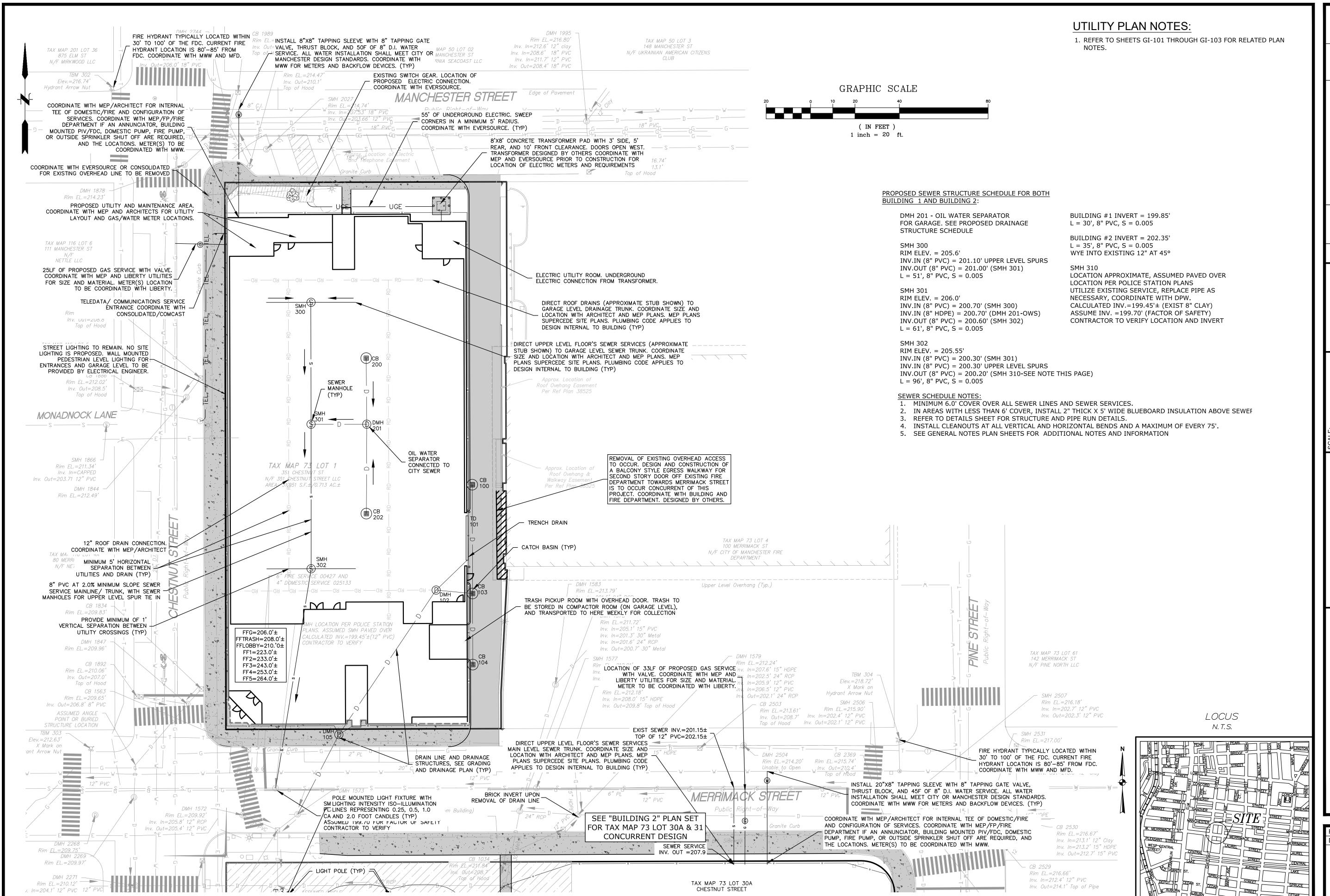
AG]

PROJ. No.: 20211191.A10

DATE: MAY 2022

 ≥ 0

CG-10



No. DATE DESCRIPTION

ARMAND ARMAND APHONSE DUBOIS III No. 11921 DRAFT CENSED HILLINGS ON AL ENGINEERING STONAL ENGINEERING STONAL

ATUM:

VERT.:

ATUM:

HORZ.:

VERT.:

20

FUSS & O'NEILL

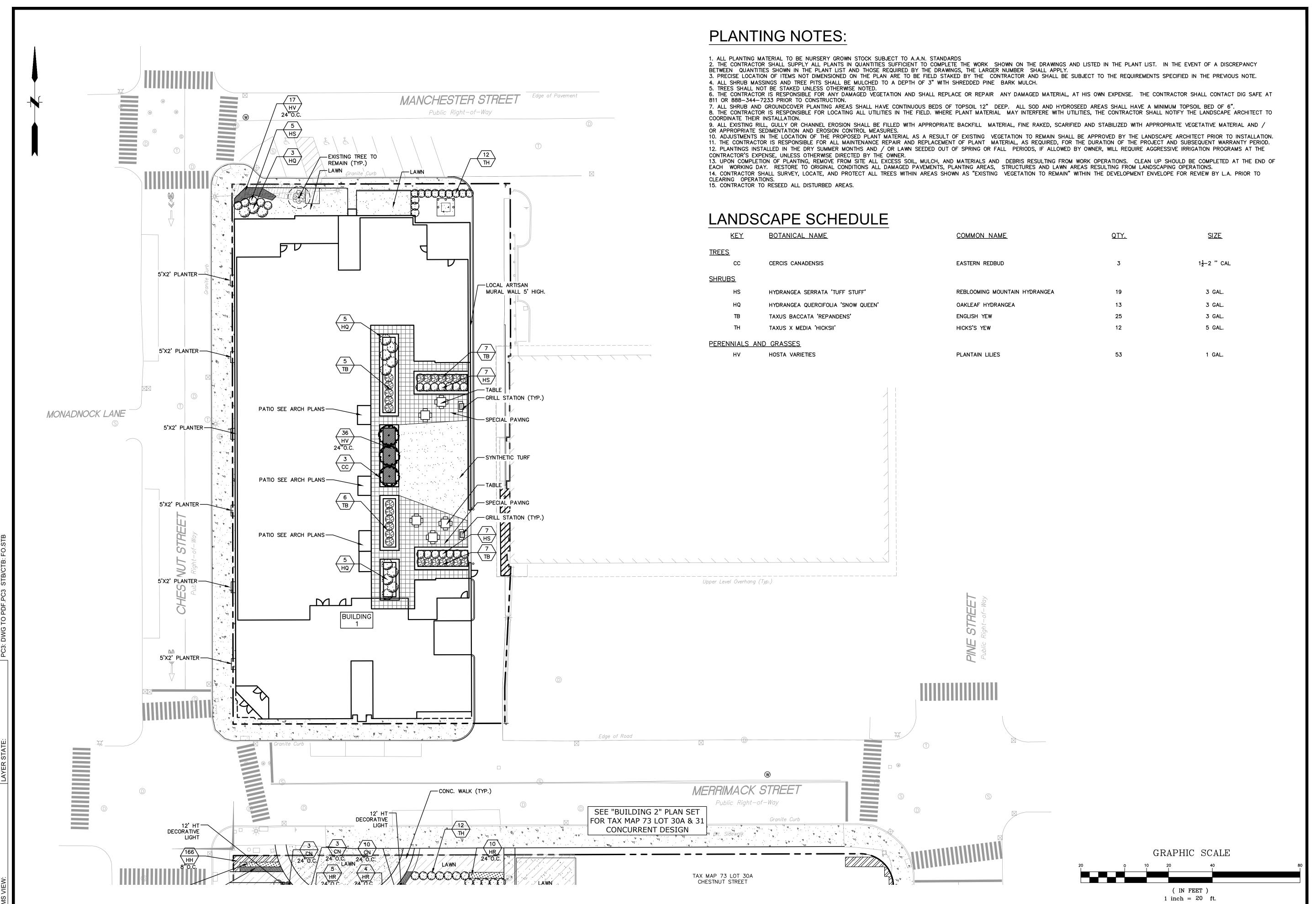
0 COMMERCIAL STREET
MANCHESTER, NEW HAMPSHIRE 03101
03,668,8223



IVIL UTILITY PLAN
TAX MAP 73 LOT 1

PROJ. No.: 20211191.A10 DATE: MAY 2022

CU-101



PLANS UNDER DESIGN DEVELOPMENT. ISSUE FOR INTERIM REVIEW ONLY. NOT FOR CONSTRUCTION

> LINCOLN AVENUE C BUILDING 1 LANDSCAPE PLANTING PLA TAX MAP 73 LO'

PROJ. No.: 20211191.A10 DATE: MAY 2022

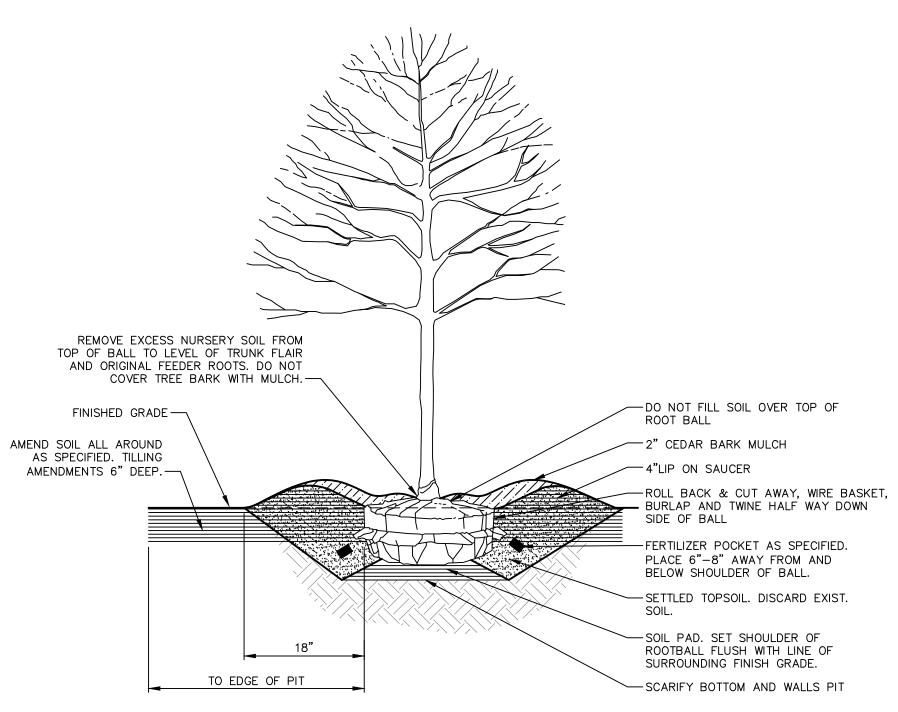
LP-101

FOR CONTAINER GROWN SHRUBS, USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL; THEN CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OF THE CONTAINER.

-PRUNE DEAD AND

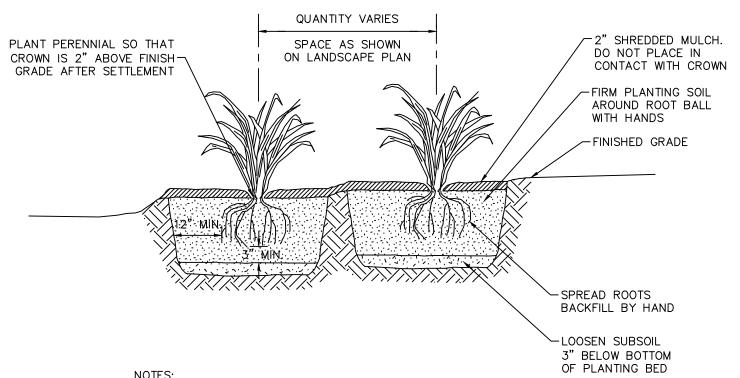
INCORPORATE COMMERCIALLY PREPARED MYCORRHIZA SPORES IN THE SOIL IMMEDIATELY AROUND THE ROOT BALL AT RATES SPECIFIED BY THE MANUFACTURER.

SHRUB PLANTING FOR CONTAINERIZED SHRUBS Scale: N.T.S.



- 1. REPORT POORLY DRAINING SOIL CONDITIONS TO ARCHITECT FOR HIS DIRECTION PRIOR TO PREPARATION AND PLANTING.
- 2. NO STOCK WRAPPED AND TIED WITH PLASTIC, PRESERVED OR NON-BIODEGRADABLE MATERIALS IS TO BE INSTALLED ON THIS JOB. REMOVE SUCH MATERIALS COMPLETELY.
- 3. SCARIFY ROOTBALLS OF CONTAINER STOCK BEFORE PLANTING.
- 4. PRUNE AS SPECIFIED AND DIRECTED BY ARCHITECT.
- 5. APPLY BIOSTIMULANT, WATER, MULCH, WRAP AND GUY WITHOUT DELAY.

TYPICAL TREE PIT PLANTING

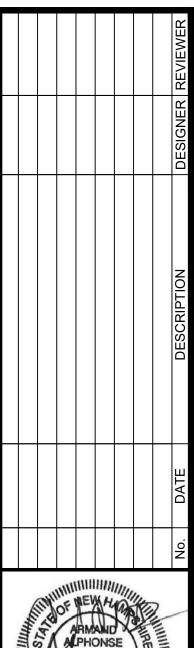


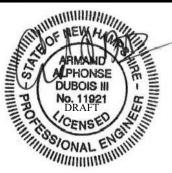
SPADED PLANTING SOIL MIX (3" BELOW ROOT BALL) ADD FERTILIZER WHEN MIXING. DO NOT COMPACT AFTER PLANTING.

- 2. WATER THOROUGHLY AFTER PLANTING.
- 3. PROVIDE WELL DRAINING SUBSOIL WHEN SOIL IS HEAVY OR COMPACTED.
- 4. FOR CONTAINER GROWN PLANTS, USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL; THEN CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OF THE CONTAINER.

PERENNIAL PLANT BED

Scale: N.T.S.







SIDENCES AT CHESTNU' BUILDING 1

PROJ. No.: 20211191.A10 DATE: MAY 2022

LS-103

— 9" CRUSHED GRAVEL

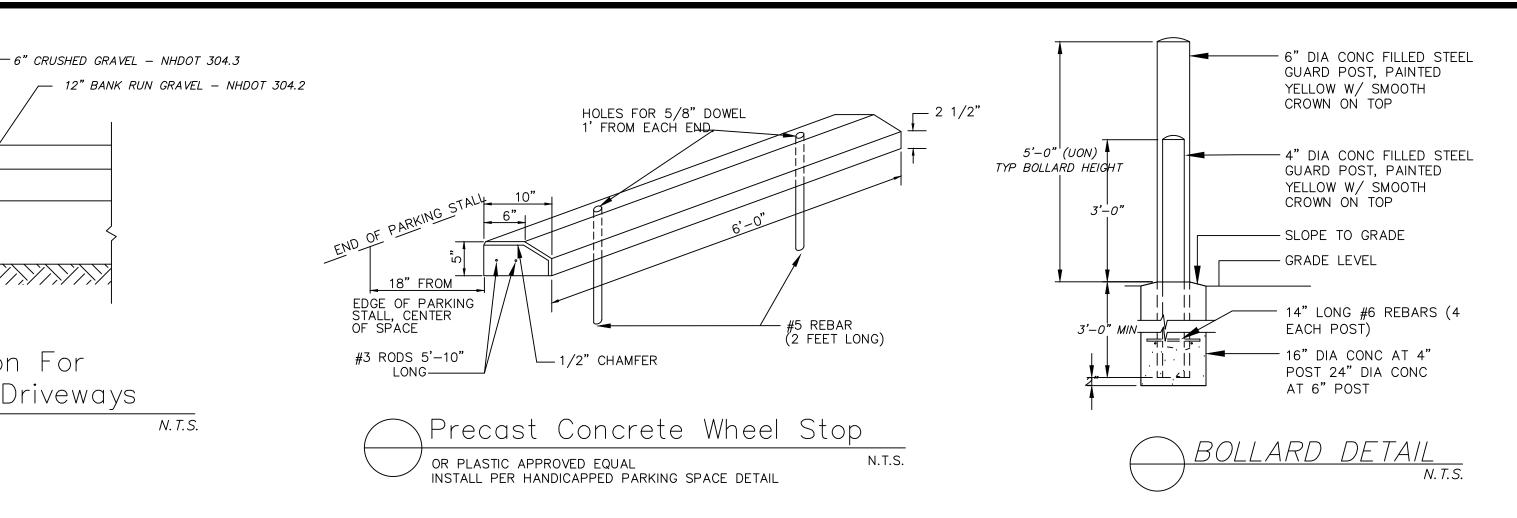
(NHDOT 304.3)

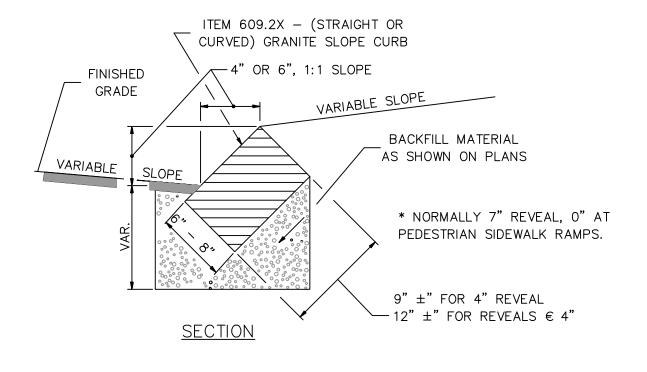
12" BANK RUN GRAVEL (NHDOT 304.2)

└─ SUBBASE COURSE

COMPACTED SUBGRADE

SUBBASE COURSE





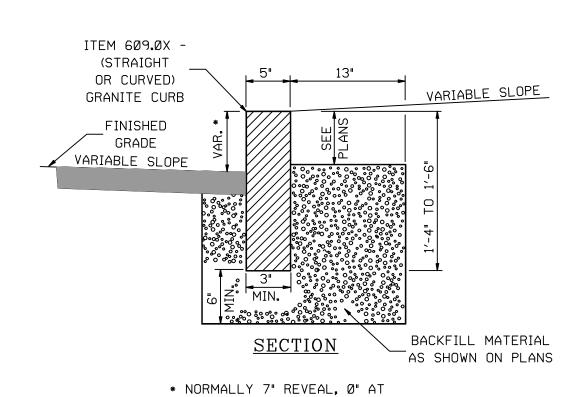
RADIUS FOR STONES WITH SQUARE JOINTS	MAXIMUM LENGTH
< 2'	USE CURVED CURB
2' - 15'	USE RADIAL JOINTS
16' - 28'	1'-6"
29' - 41'	2'
42' - 55'	3'
56' – 68'	4'
69' - 82'	5'
83' - 96'	6'
97' – 110'	7'
OVER 110'	8'
	<u> </u>

NOTES: ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH.

MINIMUM LENGTH OF STRAIGHT CURB STONES = 18" MAXIMUM LENGTH OF STRAIGHT CURB STONES = 8' MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES - SEE CHART

1. REFER TO NHDOT STANDARD PLAN CR-1 FOR ADDITIONAL INFORMATION.

NHDOT Granite Curb



PEDESTRIAN SIDEWALK RAMPS.

RADIUS	MAX. LENGTH
< 21′	USE CURVED CURB
21′	3'
22' - 28'	4'
29' - 35'	5′
36' - 42'	6'
43' - 49'	7'
5Ø′ - 56′	8'
57′ - 60′	9′
OVER 6Ø'	10'

NOTE: ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH.

MINIMUM LENGTH OF STRAIGHT CURB STONES = 3' MAXIMUM LENGTH OF STRAIGHT CURB STONES = 10' MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES - SEE CHART

1. REFER TO NHDOT STANDARD PLAN CR-1 FOR ADDITIONAL INFORMATION.

NHDOT Granite Curb

O'NEILL

PROJ. No.: 20211191.A10 DATE: MAY 2022

CD-501

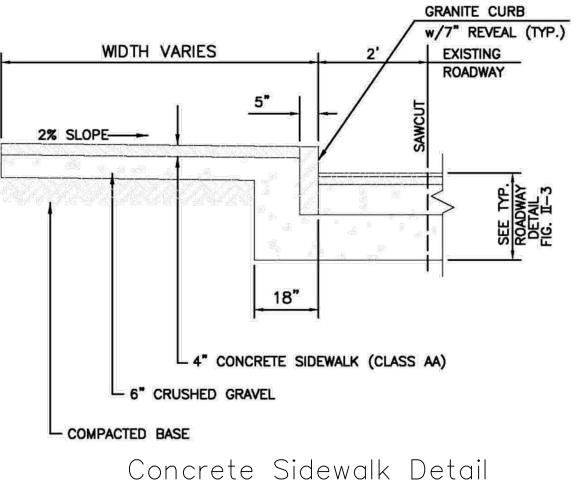
3. INTERCEPT DRAINAGE ALONG THE CURB IN ADVANCE OF THE BLENDED

4. MAINTAIN O" OF CURB REVEAL AT THE BLENDED TRANSITION. (SEE SECTION

5. A MÍNIMUM OF 5 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (IE. HYDRANTS, UTILITY POLES, SIGNS, ETC.)

6. FOR PURPOSES OF THE TACTILE PLATE LAYOUT, THE WIDTH OF THE SIDEWALK (SW) SHALL BE CONSIDERED THE WIDTH INCLUDING THE GRASS PANEL.





GRANITE -2% SLOPE ---CURB COMPACTED BASE DEPTH & MATERIALS -6" CRUSHED 1'-6" GRAVEL -3" BIT. SIDEWALK 2" BINDER COURSE, 0.114 TON/SY 1" WEARING COURSE, 0.057 TON/SY

1. ALL PROPOSED NEW ROADWAYS SHALL USE A 6 FOOT SIDEWALK AND 4 FOOT GRASS PANEL CONFIGURATION.

SIDEWALK

WIDTH VARIES (6' MIN)

GRASS PANEL

WIDTH VARIES

2. LIGHT POLES AND MAILBOXES SHALL BE PLACED IN GRASS PANEL AREA. WHEN GRASS PANEL DOES NOT EXIST, THE WIDTH OF SIDEWALK BEHIND THE STRUCTURE SHALL NOT BE LESS THAN 5 FEET.

3. DEPENDING ON RIGHT OF WAY CONSTRAINTS AND OTHER LOCAL

CONDITIONS, GRASS PANEL MAY BE REDUCED OR ELIMINATED, FINAL DETERMINATION TO BE MADE BY THE ENGINEER.

4. BINDER AND WEARING COURSES SHALL CONFORM TO MIX FORMULAS OUTLINED IN SECTION 608 OF THE STANDARD SPECIFICATIONS.

BITUMINOUS SIDEWALK

NOT TO SCALE FIGURE 608-1

5" DYED STAMPED

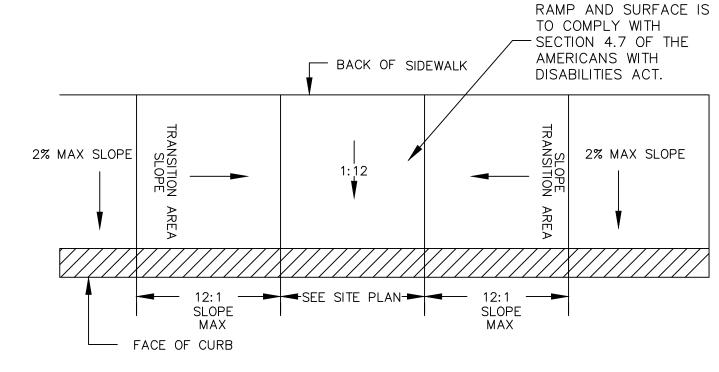
CONCRETE SIDEWALK

(BRICK PATTERN AS

SHOWN ABOVE)

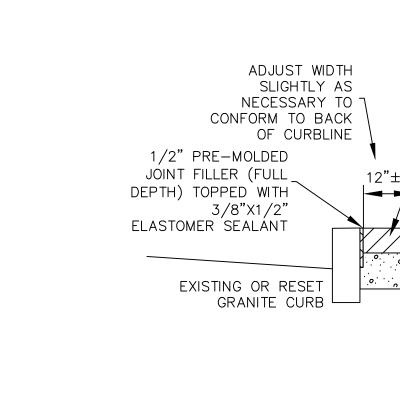
──8" CRUSHED GRAVEL

- COMPACTED BASE



Handicap Sidewalk Ramp

- EDGE OF BUILDING



1. CONTRACTOR TO CONSTRUCT 10' SECTION OF SIDEWALK AT LOCATION TO BE AGREED UPON FOR REVIEW BY CITY AND CONTRACTOR PRIOR TO FULL SIDEWALK CONSTRUCTION.

2. CONCRETE SIDEWALKS SHALL BE SEALED ACCORDING TO CITY OF MANCHESTER SPECIFICATIONS.

INTEGRAL COLOR COLORANT SHALL BE L.M. SCOFIELD, CO CHROMIX ADMIXTURE OR APPROVED EQUAL. 'BURNT RED' COLOR DYED THROUGHOUT. REVIEW OF THE COLOR IS TO BE CONFIRMED WITH DPW AND PCD.

4. BRICK PATTERN TO BE CREATED USING SCOFIELD SYSTEMS LITHOTEX PAVECRAFTERS TRADITIONAL BRICK PATTERNS "NEW BRICK - SOLDIER BORDER" AND "NEW BRICK — SAILOR BORDER" OR EQUAL. CUSTOM EQUIVALENT PATTERN MAY BE SUBSTITUTED.

5. 12" TEXTURED CONCRETE TO BE CAST FIRST AND INTERIOR CONCRETE TO BE CAST ADJACENT TO BRICK COURSE. PLASTIC COVERING IS RECOMMENDED TO PROTECT BRICK DURING INTERIOR SIDEWALK

6. THE STAMPED CONCRETE SHALL BE CONSTRUCTED BY AN ACI FLATWORK EXPERIENCED CONTRACTOR WHICH CAN PROVIDE A SAMPLE OF SIMILAR PREVIOUS WORK.

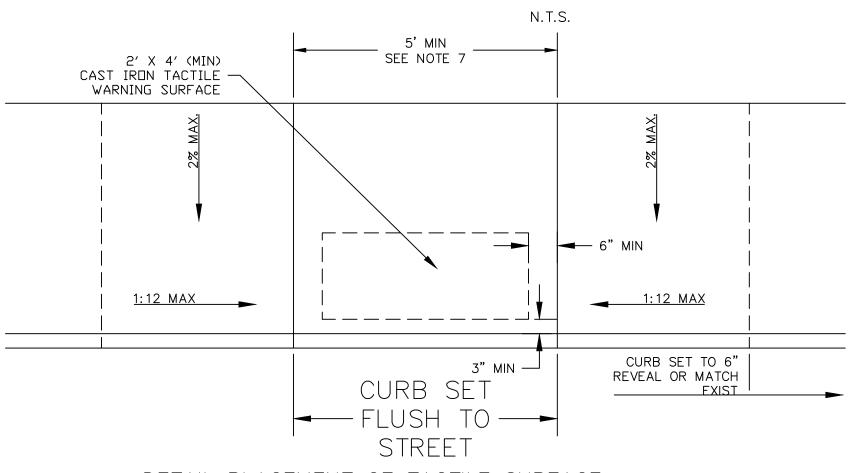
7. CONCRETE TO BE FIBROUS REINFORCED PROVIDED BY PROPEX "FIBERMESH" (OR EQUAL) PER MANUFACTURERS RECOMMENDATION.



5" CONCRETE SIDEWALK

FIBER REINFORCED

- W/LIGHT BROOM FINISH



DETAIL PLACEMENT OF TACTILE SURFACE

1. SLOPE OF RAMP VARIES WITH SIDEWALK WIDTH AND HEIGHT, WITH A MAXIMUM SLOPE OF 12:1 AND MINIMUM SLOPE OF 16:1 A BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP SHALL BE USED ON PORTLAND CEMENT CONCRETE RAMPS

MAINTAIN THE NORMAL GUTTER PROFILE THROUGH THE RAMP AREA

4. INTERCEPT DRAINAGE ALONG THE CURB IN ADVANCE OF THE RAMP

5. MAINTAIN O" OF CURB REVEAL AT THE RAMP 6. A MINIMUM OF 4 FEET CLEAR SHALL BE MAINTAINED BY ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (IE. HYDRANTS,

7. A WIDTH OF LESS THAN 5 FEET MAY BE PERMISSIBLE AT THE CITY'S DISCRESSION. DIMENSIONS THAT DO NOT COMPLY WITH

ADA TITLE III REGULATIONS WILL NOT BE ALLOWED 8. CROSS SLOPE WITHIN ACCESSIBLE ROUTE SHALL NOT EXCEED 2%.

TYPICAL SIDEWALK RAMP

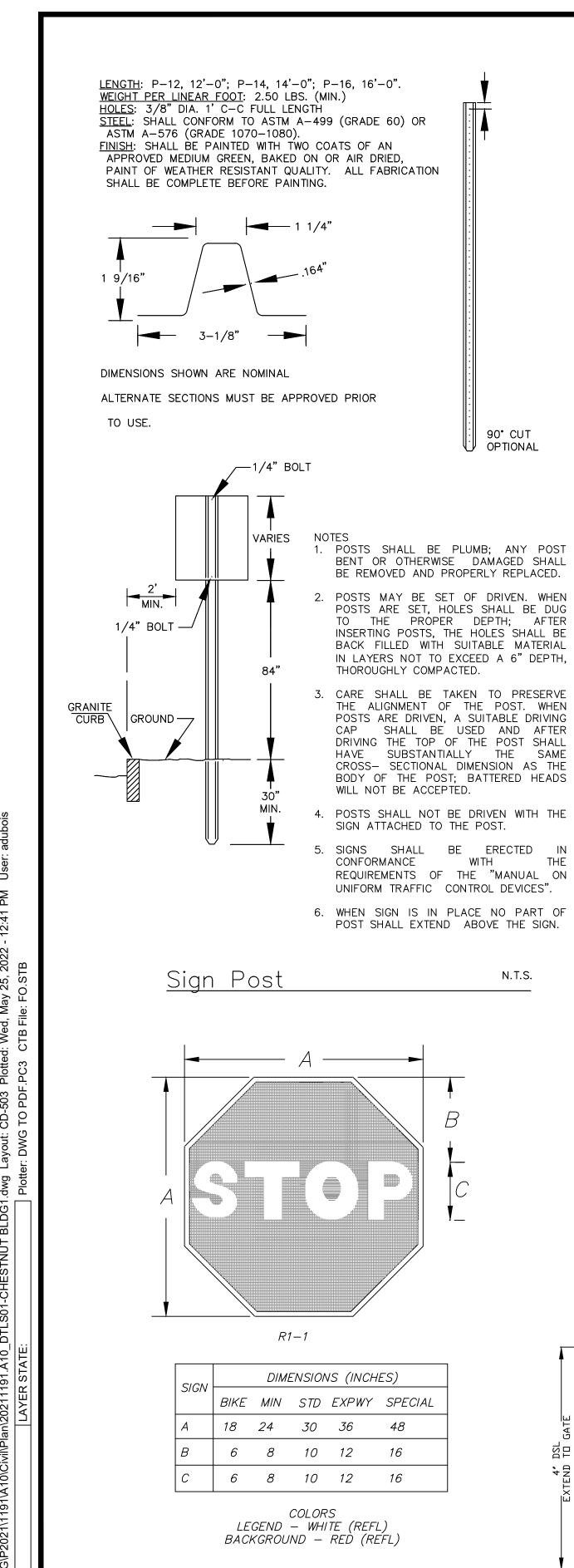
O'NEILL

APHONSE

DUBOIS III

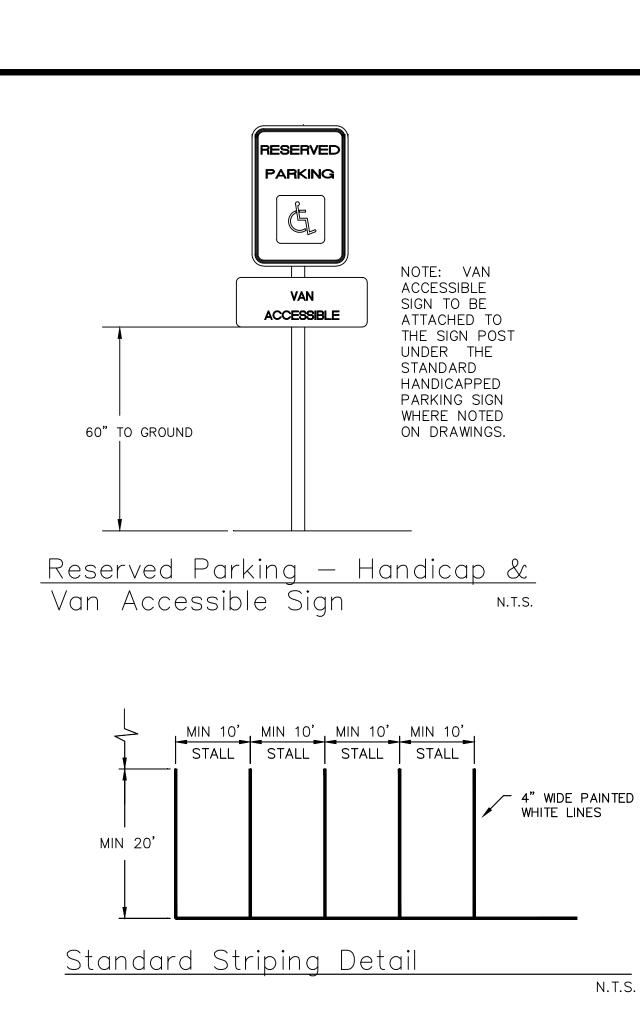
SIDEWALK & TAX MAP 73 I

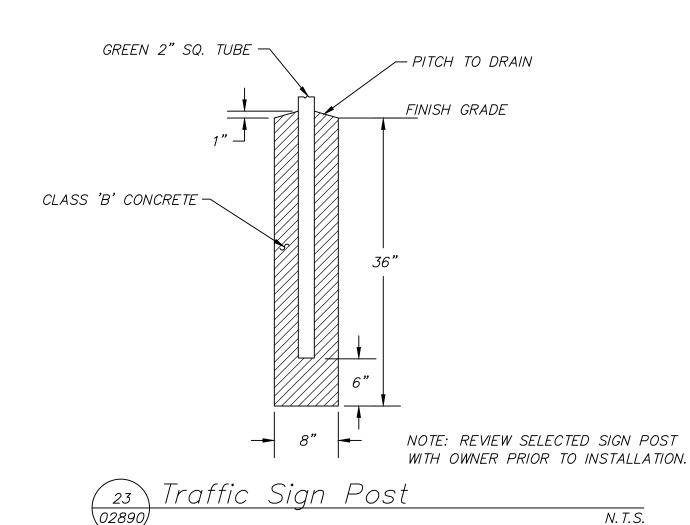
PROJ. No.: 20211191.A10 DATE: MAY 2022

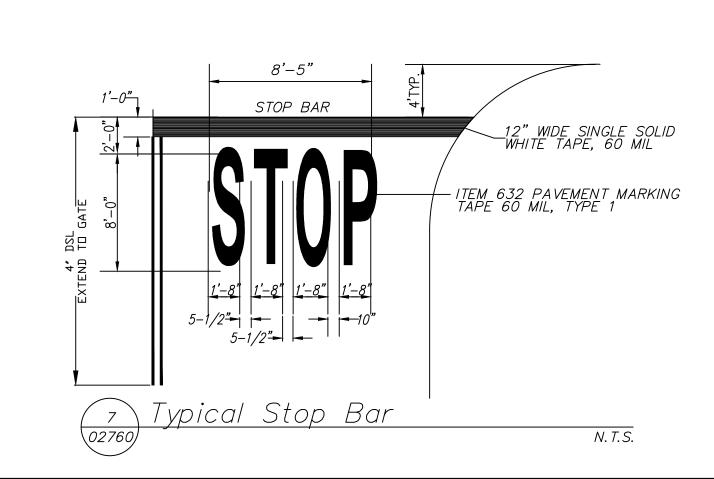


Stop Sign

N. T. S.



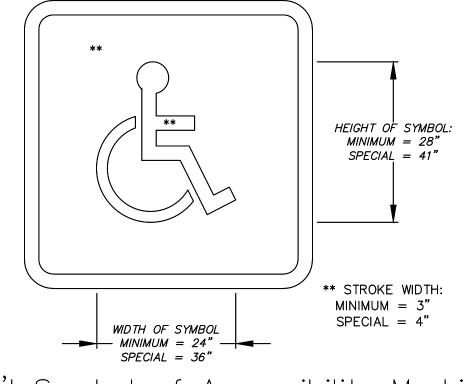






Reserved Parking Handicap Sign

N.T.S.

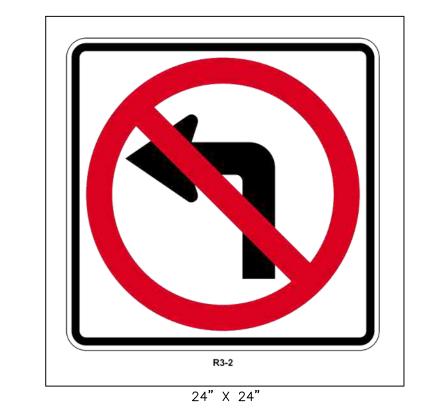


Int'l Symbol of Accessibility Marking

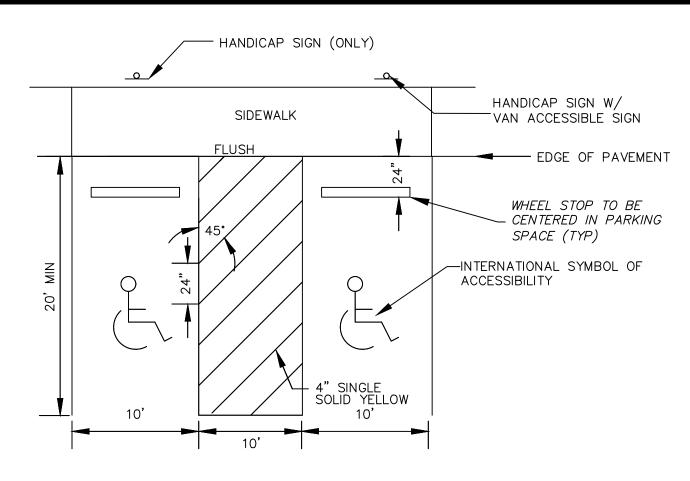
N.T.S.



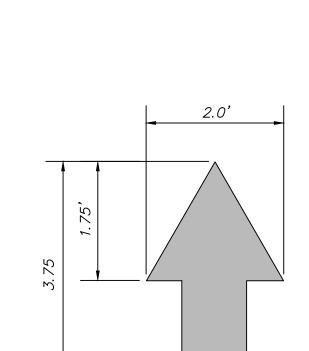
R3-5R Right Turn Only Sign

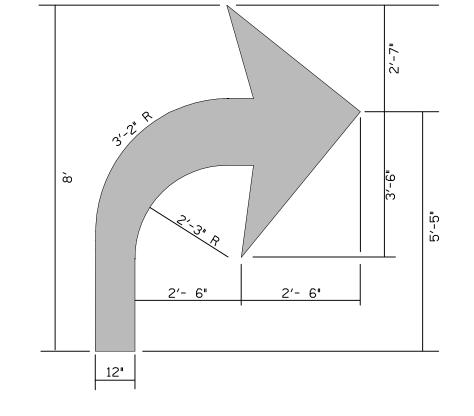


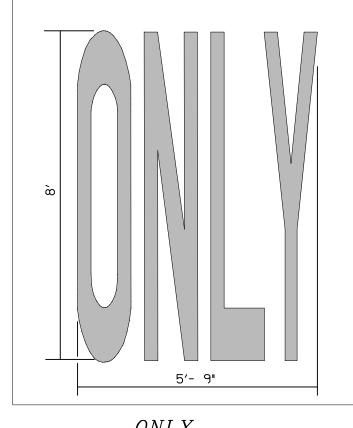
R3-2 No Left Turn Sign N.T.S.



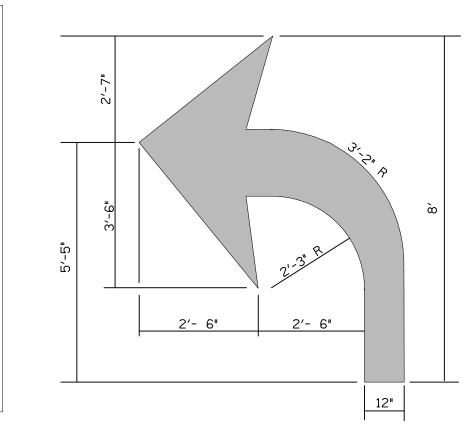
Handicap Parking Space Detail (Van Accessible)







ONLY $PAY QUANTITY = 22.3 FT^{2}$



TURN ARROW $PAY QUANTITY = 17.0 FT^{2}$

GENERAL NOTES

- 1. ALL WORDS AND SYMBOLS SHALL BE RETROREFLECTIVE WHITE AND SHALL CONFORM TO THE LATEST VERSION OF
- 2. MULTI-WORD MESSAGES SHALL READ "UP"; THAT IS, THE FIRST WORD SHALL BE NEAREST THE APPROACHING DRIVER.
- 3. THE WORD "ONLY" SHALL NOT BE USED WITH THROUGH OR COMBINATION ARROWS, AND SHALL NOT BE USED
- ADJACENT TO A BROKEN LANE LINE. A WORD/SYMBOL SHALL PRECEED THE WORD "ONLY".
- 4. COMBINATION ARROWS MAY BE COMPRISED OF 2 SINGLE ARROWS (e.g. TURN AND THROUGH ARROWS), HOWEVER, THE SHAFTS OF THE ARROWS SHALL COINCIDE AS SHOWN.
- 5. PREFORMED WORDS AND SYMBOLS SHALL BE PRE-CUT BY THE MANUFACTURER.
- 6. WRONG-WAY ARROWS SHALL NOT BE SUBSTITUTED FOR THROUGH ARROWS. 7. ALL STOP BARS, WORDS, SYMBOLS AND ARROWS SHALL BE THERMOPLASTIC.

Pavement Markings

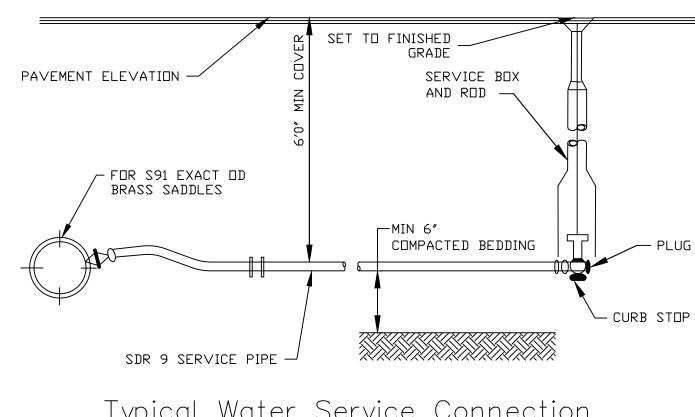
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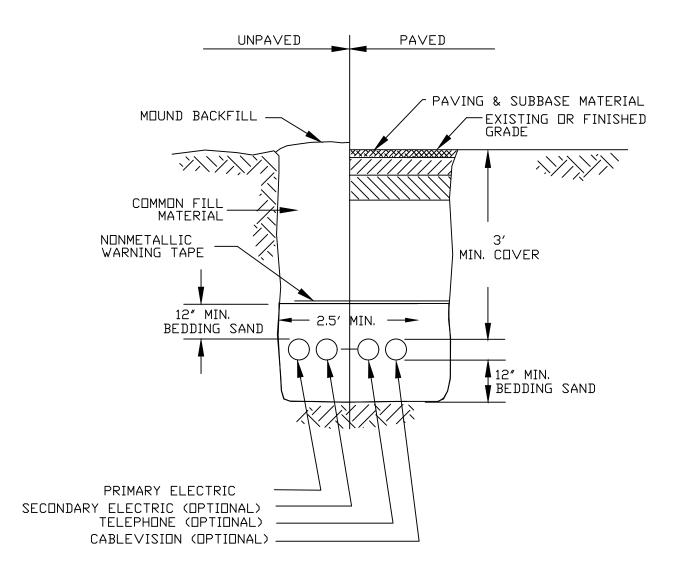


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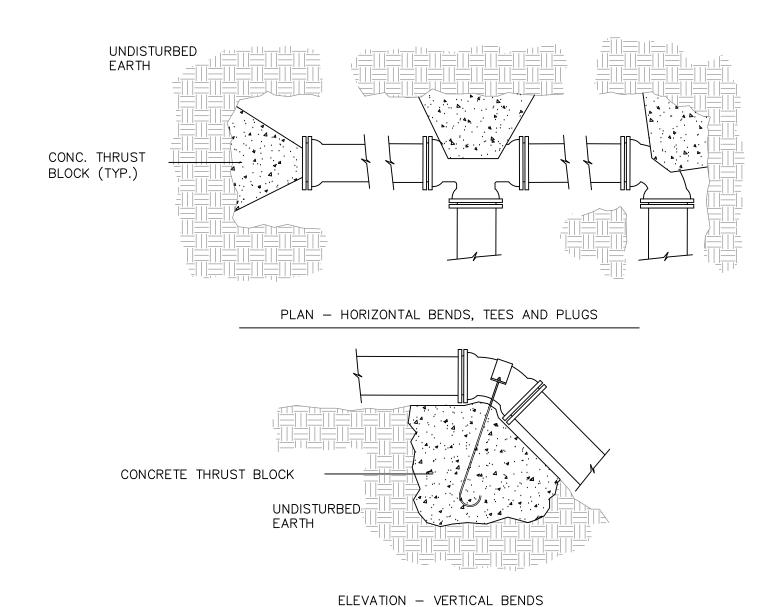
CD-503



Typical Water Service Connection



Utility Trench UTILITY TRENCH MAY VARY. CONTRACTOR SHALL COORDINATE INSTALLATION WITH EACH UTILITY COMPANY AND INSTALL PER THEIR SPECIFICATIONS AND REQUIREMENTS.

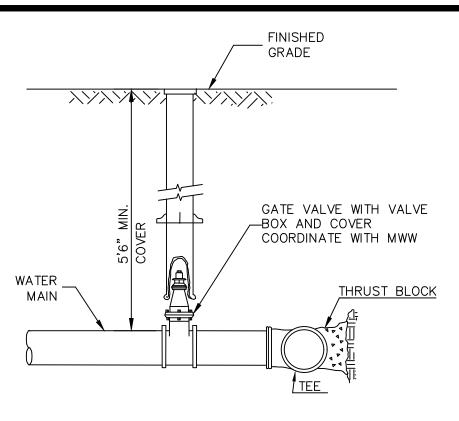


NOTES 1. THRUST BLOCK DIMENSIONS TO BE DETERMINED IN FIELD BY ENGINEER BASED ON PIPE SIZE, WATER PRESSURE AND SOIL TYPE.

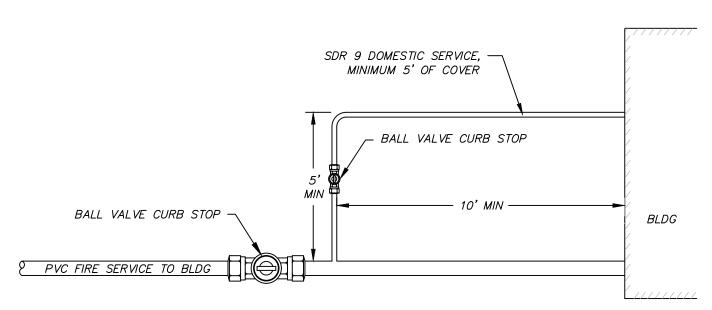
2. STONE BACKING MAY BE SUBSTITUTED FOR CONCRETE THRUST BLOCKS PROVIDED THE STONE(S) ARE OF EQUAL SIZE AND BEAR ON UNDISTURBED EARTH. 3. USE OF JOINT RESTRAINT SYSTEMS SHALL NOT ELIMINATE THRUST BLOCK REQUIREMENTS (WHERE POSSIBLE).

N.T.S.

Typical Thrust Blocks



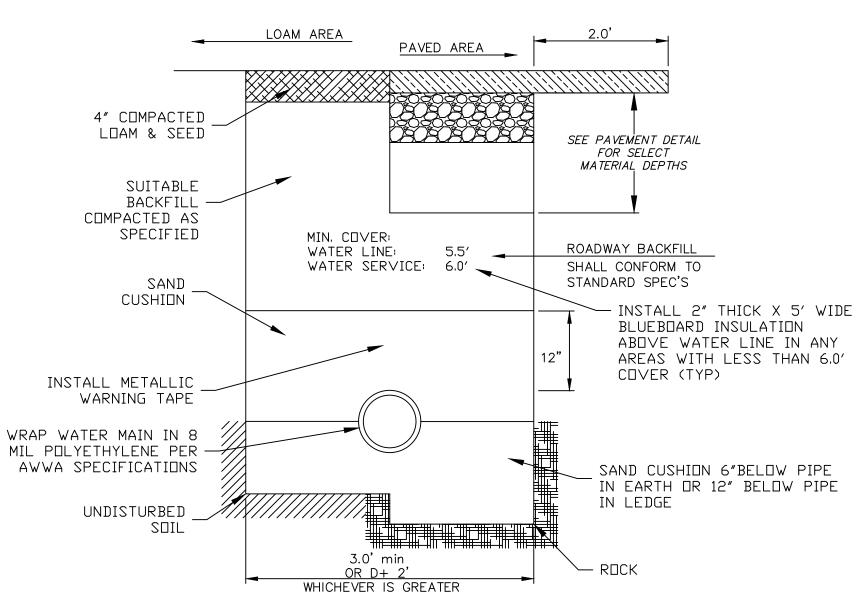
Buried Gate Valve Detail N.T.S.



NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO HAWC TECHNICAL SPECIFICATIONS. 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.

Typical Domestic Water Service Tapped Off Fire Service



1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS. DEPTH FOR BITUMINOUS PAVEMENT SHALL BE AS SPECIFIED IN PAVEMENT DETAIL.

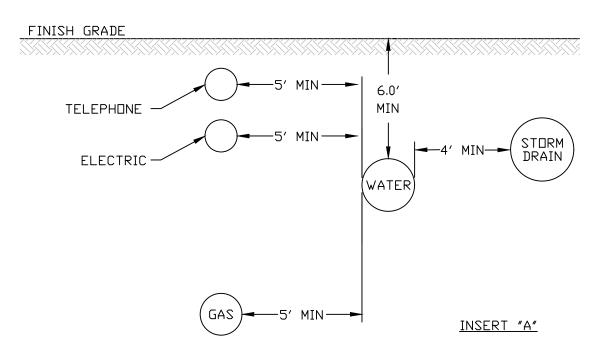
. NEW ROADWAY CONSTRUCTION SHALL CONFORM TO TOWN SPECIFICATIONS. . MATERIAL SHALL BE REPLACED IN KIND WHENEVER POSSIBLE.

4. A MINIMUM 2' CUTBACK IS REQUIRED AT THE TOP OF THE TRENCH WALL OVER UNDISTURBED MATERIAL.

COMPACTION SHALL BE IN 12-INCH LAYERS FOR BEDDING AND BLANKET MATERIALS. 6. BACKFILL MATERIAL SHALL BE COMPACTED IN NO MORE THAN 3-FOOT THICK LAYERS TO THE GROUND SURFACE EXCEPT FOR ROAD CONSTRUCTION WHERE THE FINAL 3 FEET SHALL BE COMPACTED IN NOT MORE THAN 12—INCH THICK LAYERS TO THE ROAD

Typical Water Trench Detail

N.T.S.



NOTES:

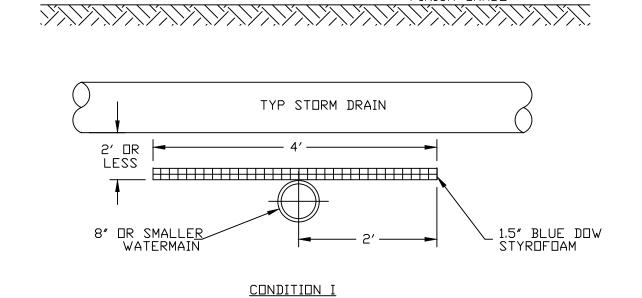
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO WATER MWW TECHNICAL SPECIFICATIONS.

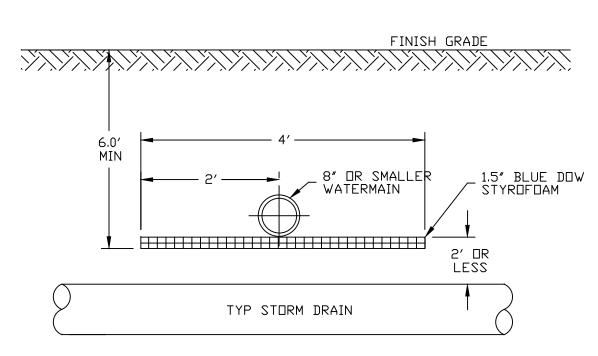
2. ALL WATER MAINS SHOULD HAVE A MINIMUM DEPTH OF 6.0 FROM TOP OF PIPE TO FINISH GRADE.

3. AT CROSSINGS WHERE 10' HORIZONTAL SEPARATION IS NOT POSSIBLE 18" VERTICAL SEPARATION SHALL BE PROVIDED. SEE INSERT "A".

4. A MINIMUM 10' HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL WATER AND SEWER UTILITIES. AT MAIN AND SERVICE CROSSINGS WHERE 10' HORIZONTAL SEPARATION IS NOT POSSIBLE, AN 18" VERTICAL (SEWER) CLEARANCE SHALL BE PROVIDED WITH WATER OVER SEWER.

Water Main-Numerous Details Separation





CONDITION II

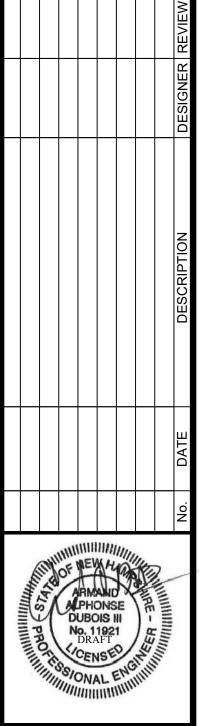
1. HAWC RESERVES THE RIGHT TO MODIFY INSULATION REQUIREMENTS AS NECESSARY BASED ON FIELD CONDITIONS, ETC.

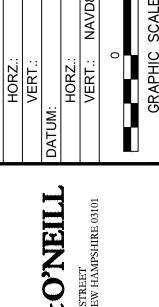
2. THE LENGTH OR WIDTH OF INSULATION SHALL EXTEND 1 STORM DRAIN PIPE DIAMETER BEYOND THE EDGE OF STORM DRAIN PIPE IN EACH DIRECTION OR A MINIMUM OF 2' BEYOND THE CENTERLINE OF THE STORM DRAIN PIPE, WHICHEVER IS GREATER.

3. ALL BUTT JOINT SEAMS TO BE OVERLAPPED WITH A 1' PIECE OF INSULATION CENTERED OVER SEAM.

Storm Drain -Watermain Intersecting Runs

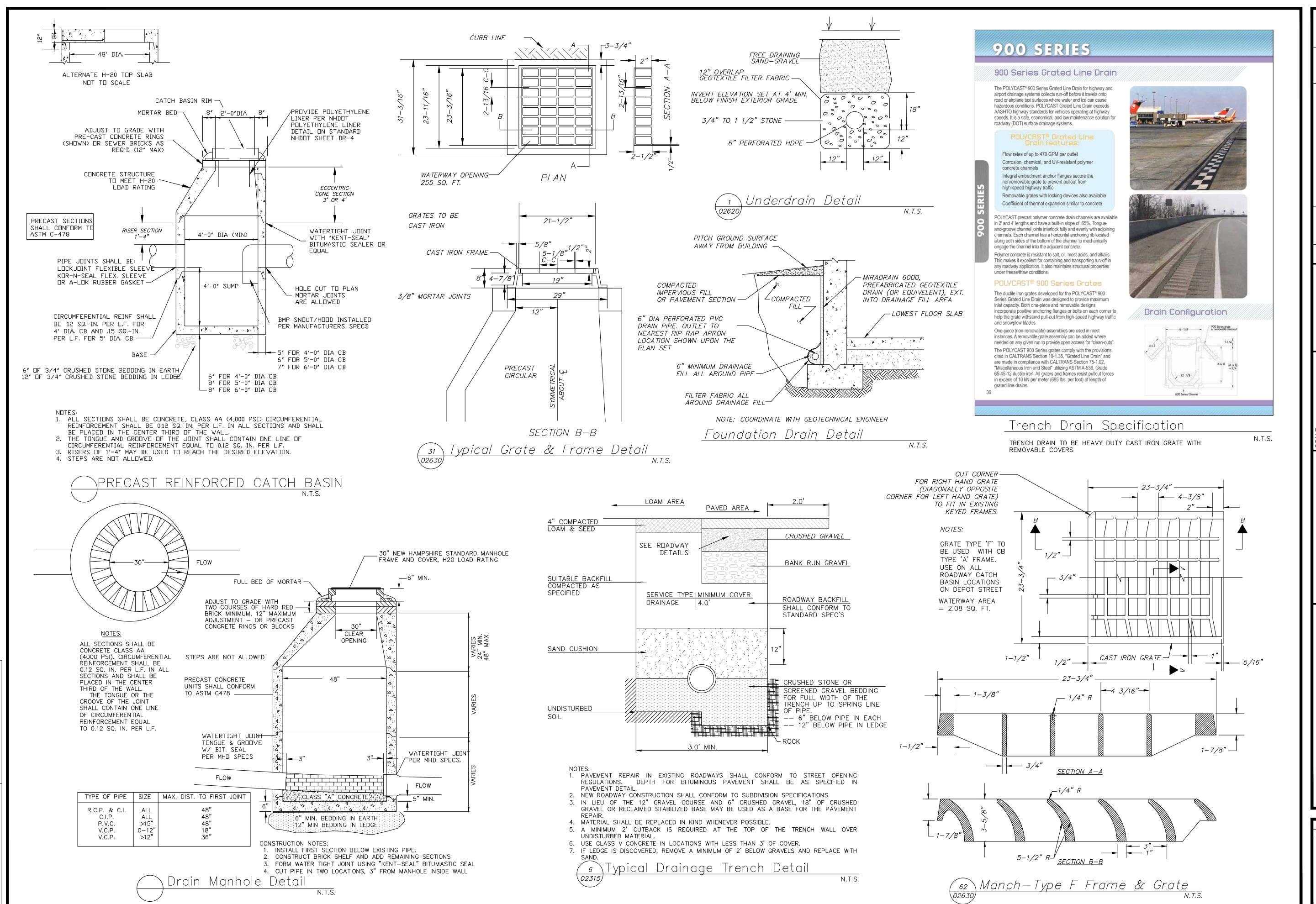
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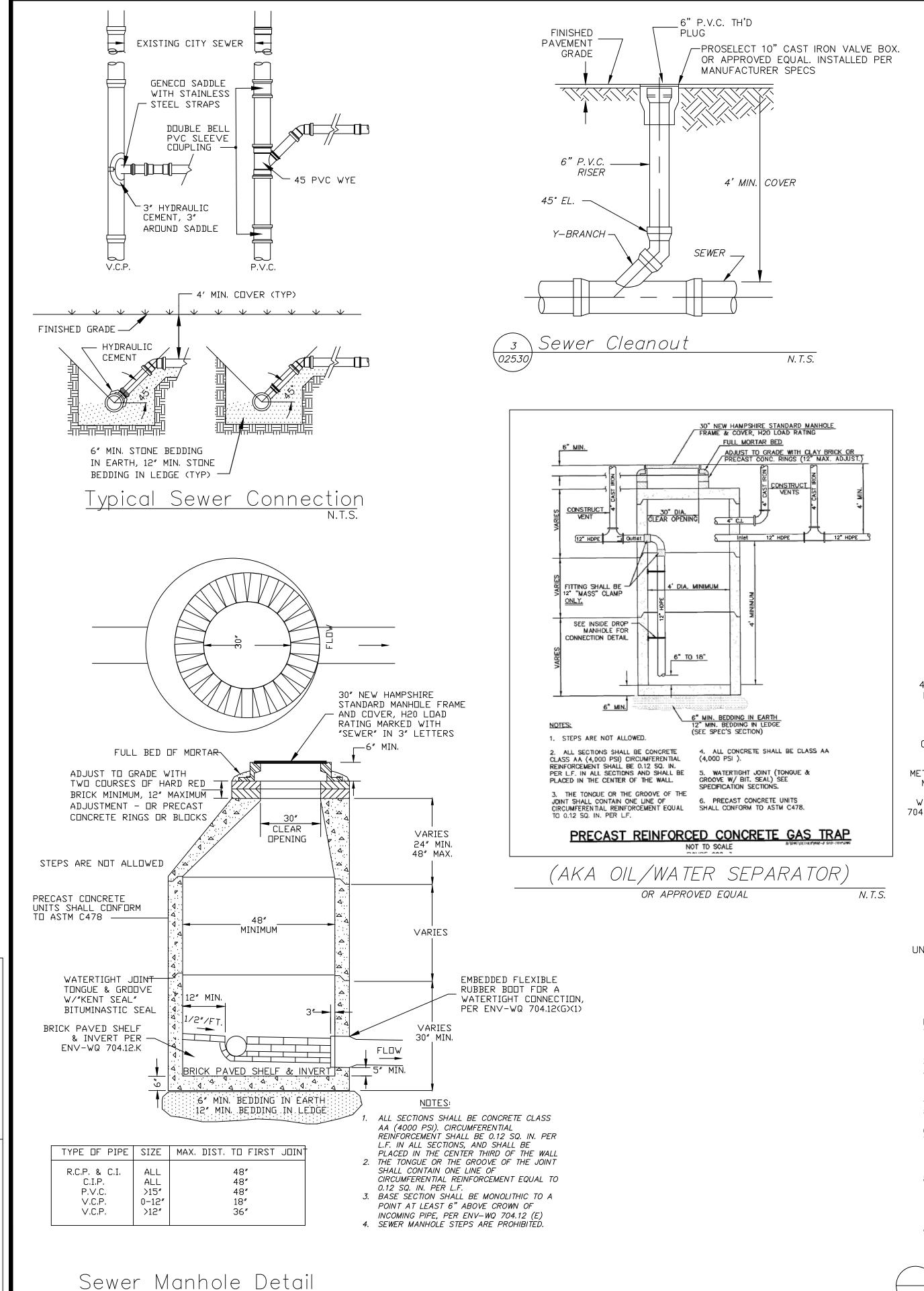


ARMAND DUBOIS III No. 11921 DRAFT

IDENCES AT CHESTNUT
BUILDING 1
CIVIL DETAILS
STORMWATER
TAX MAP 73 LOT 1
S1 CHESTNUT STREET

PROJ. No.: 20211191.A10 DATE: MAY 2022

CD-505



N.T.S.

GRAVITY SEWER TESTING REQUIREMENTS

PER ENV-WQ 704.06 GRAVITY SEWER PIPE TESTING.

(A) ALL NEW GRAVITY SEWERS SHALL BE TESTED FOR WATER TIGHTNESS BY THE USE OF LOW-PRESSURE AIR TESTS.

(B) LOW-PRESSURE AIR TESTING SHALL BE IN CONFORMANCE WITH THE FOLLOWING TESTING STANDARDS IN EFFECT AT THE TIME THE TEST IS CONDUCTED: (1) ASTM F1417 "STANDARD TEST METHOD FOR INSTALLATION ACCEPTANCE OF PLASTIC GRAVITY SEWER LINES USING LOW-PRESSURE AIR", AVAILABLE AS NOTED IN

(2) UNI-BELL PVC PIPE ASSOCIATION UNI-B-6, "LOW-PRESSURE AIR TESTING OF INSTALLED SEWER PIPE", AVAILABLE AS NOTED IN APPENDIX D. (C) ALL NEW GRAVITY SEWERS SHALL BE:

(1) CLEANED AND VISUALLY INSPECTED USING A LAMP TEST AND BY INTRODUCING WATER TO DETERMINE THAT THERE IS NO STANDING WATER IN THE SEWER: AND (2) TRUE TO LINE AND GRADE FOLLOWING INSTALLATION AND PRIOR TO USE. NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES 15 ENV-WQ 700

(D) ALL PLASTIC SEWER PIPE SHALL BE VISUALLY INSPECTED AND DEFLECTION TESTED NOT LESS THAN 30 DAYS NOR MORE THAN 90 DAYS FOLLOWING

(E) THE MAXIMUM ALLOWABLE DEFLECTION OF FLEXIBLE SEWER PIPE SHALL BE 5% PÈRCENT OF AVERAGE INSIDE DIAMETER. A RIGID BALL OR MANDREL WITH A DIAMETER OF AT LEAST 95% OF THE AVERAGE INSIDE PIPE DIAMETER SHALL BE USED FOR TESTING PIPE DEFLECTION. THE DEFLECTION TEST SHALL BE CONDUCTED WITHOUT MECHANICAL PULLING DEVICES.

MANHOLE TESTING REQUIREMENTS.

PER ENV-WQ 704.17 MANHOLES: TESTING.

(A) MANHOLES SHALL BE TESTED FOR LEAKAGE USING A VACUUM TEST IN ACCÓRDANCE WITH THE ASTM C1244 STANDARD IN EFFECT WHEN THE TESTING IS PERFORMED, AVAILABLE AS NOTED IN APPENDIX D. A MANHOLE MAY BE BACKFILLED PRIOR TO PERFORMING A VACUUM TEST, BUT IF THE MANHOLE FAILS THE VACUUM TEST, BACKFILL SHALL BE REMOVED SO REPAIRS TO THE MANHOLE CAN BE MADE FROM THE OUTSIDE OF THE MANHOLE PRIOR TO RETESTING.

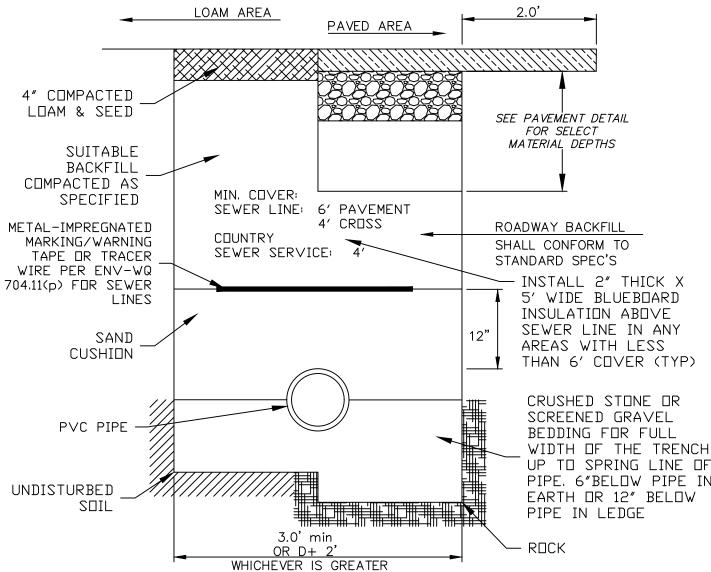
(B) THE MANHOLE VACUUM TEST SHALL CONFORM TO THE FOLLOWING: (1) THE INITIAL VACUUM GAUGE TEST PRESSURE SHALL BE 10 INCHES HG; AND NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES 23 ENV-WQ 700 (2) THE MINIMUM ACCEPTABLE TEST HOLD TIME FOR A 1-INCH HG PRESSURE DROP TO

9 INCHES HG SHALL BE: A. NOT LESS THAN 2 MINUTES FOR MANHOLES LESS THAN 10 FEET DEEP IN DEPTH; B. NOT LESS THAN 2.5 MINUTES FOR MANHOLES 10 TO 15 FEET DEEP; AND

C. NOT LESS THAN 3 MINUTES FOR MANHOLES MORE THAN 15 FEET DEEP; (C) THE MANHOLE SHALL BE REPAIRED AND RETESTED IF THE TEST HOLD TIMES FAIL TO ACHIEVE THE ACCEPTANCE LIMITS SPECIFIED IN (B), ABOVE

(D) INVERTS AND SHELVES SHALL NOT BE INSTALLED UNTIL AFTER SUCCESSFUL TESTING IS COMPLETED.

(E) IMMEDIATELY FOLLOWING COMPLETION OF THE LEAKAGE TEST, THE FRAME AND CÒVER SHALL BE PLACED ON THE TOP OF THE MANHOLE OR SOME OTHER MEANS USED TO PREVENT ACCIDENTAL ENTRY BY UNAUTHORIZED PERSONS, CHILDREN, OR ANIMALS, UNTIL THE CONTRACTOR IS READY TO MAKE FINAL ADJUSTMENT TO GRADE.



- 1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS. DEPTH FOR BITUMINOUS PAVEMENT SHALL BE AS SPECIFIED IN
- 2. NEW ROADWAY CONSTRUCTION SHALL CONFORM TO SUBDIVISION SPECIFICATIONS. 3. IN LIEU OF THE 12" GRAVEL COURSE AND 6" CRUSHED GRAVEL, 18" OF CRUSHED GRAVEL OR RECLAIMED STABILIZED BASE MAY BE USED AS A BASE FOR THE PAVEMENT 4. MATERIAL SHALL BE REPLACED IN KIND WHENEVER POSSIBLE.
- 5. A MINIMUM 2' CUTBACK IS REQUIRED AT THE TOP OF THE TRENCH WALL OVER UNDISTURBED MATERIAL.
- 6. COMPACTION SHALL BE IN 12-INCH LAYERS FOR BEDDING AND BLANKET MATERIALS. 7. BACKFILL MATERIAL SHALL BE COMPACTED IN NO MORE THAN 3-FOOT THICK LAYERS TO THE GROUND SURFACE EXCEPT FOR ROAD CONSTRUCTION WHERE THE FINAL 3 FEET SHALL BE COMPACTED IN NOT MORE THAN 12-INCH THICK LAYERS TO THE ROAD SURFACE.
- 8. TRENCHES FOR SEWER CONSTRUCTION SHALL MEET THE REQUIREMENTS OF ENV-WQ 704.11. PIPE TRENCH BEDDING MATERIAL SHALL BE #67 STONE (ASTM C33/C33M) PER ENV-WQ 704.11(a). SAND BLANKET MATERIAL SHALL CONFORM WITH PROVISIONS OF ENV-WQ 704.11(b). TRENCH BACKFILL MATERIAL SHALL CONFORM WITH ENV-WQ
- 9. GRAVITY SEWER CONSTRUCTION MATERIALS SHALL MEET THE REQUIREMENTS OF ENV WQ. 704.05. PVC PIPE SHALL CONFORM WITH ASTM D3034 AND ASTM D2412 AND PVC JOINTS SEALS SHALL CONFORM WITH ASTM D3212.

SEWER MANHOLE NOTES:

ALL SECTIONS SHALL BE CONCRETE CLASS AA (4000 PSI). CIRCUMFERENTIAL REINFORCEMENT SHALL BE Ø.12 SQ. IN. PER L.F. IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL. THE TONGUE OR THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER L.F..

HORIZONTAL JOINTS BETWEEN SECTIONS OF PRE-CAST CONCRETE BARRELS SHALL BE OF AN OVERLAPPING TYPE SEALED FOR WATER-TIGHTNESS USING A DOUBLE ROW OF AN ELASTOMERIC OR MASTIC-LIKE SEALANT

ALL PRECAST SECTIONS AND BASES SHALL BE COATED ON THE EXTERIOR WITH A BITUMINOUS. DAMP-PROOF COATING.

(A) MATERIALS OF CONSTRUCTION FOR MANHOLES SHALL BE AS FOLLOWS: (1) CONCRETE FOR MANHOLES AND CONCRETE GRADE RINGS SHALL CONFORM TO THE REQUIREMENTS FOR CLASS AA CONCRETE IN THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATIONUS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS AVAILABLE AT HTTP://WWW.NH.GOV/DOT/ORG/PROJECTDEVELOPMENT/HIGHWAYDESIGN/SPECIFICATIONS/INDEX.HTM

(2) REINFORCING FOR CONCRETE MANHOLES AND CONCRETE GRADE RINGS SHALL BE STEEL OR STRUCTURAL FIBERS THAT CONFORM TO THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION IS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS AVAILABLE HTTP://www.nh.gov/DOT/ORG/PROJECTDEVELOPMENT/HIGHWAYDESIGN/SPECIFICATIONS/INDEX.HTM (3) PRECAST CONCRETE BARREL SECTIONS, CONES, AND BASES SHALL BE CERTIFIED BY THEIR MANUFACTURER(S) AS CONFORMING TO THE ASTM C478 STANDARD IN EFFECT AT THE TIME THE

BARREL SECTIONS, CONES, AND BASES ARE MANUFACTURED; (4) THE MANHOLE FRAME AND COVER SHALL PROVIDE A 30-INCH DIAMETER CLEAR OPENING; (5) THE MANHOLE COVER SHALL HAVE THE WORD SEWER IN 3-INCH LETTERS CAST INTO

(6) THE CASTINGS SHALL BE OF EVEN-GRAINED CAST IRON, SMOOTH, AND FREE FROM SCALE, LUMPS, BLISTERS, SAND HOLES, AND DEFECTS; (7) CONTACT SURFACES OF COVERS AND FRAMES SHALL BE MACHINED AT THE FOUNDRY TO PREVENT ROCKING OF COVERS IN ANY ORIENTATION;

(8) CASTINGS SHALL BE EQUAL TO CLASS 30 AND CERTIFIED BY THEIR MANUFACTURER AS CONFORMING TO THE ASTM A48/48M STANDARD IN EFFECT AT THE TIME THE CASTINGS WERE MANUFACTURED: (9) BRICK MASONRY FOR SHELF. INVERT. AND GRADE ADJUSTMENT SHALL BE CERTIFIED BY ITS

MANUFACTURER AS COMPLYING WITH THE ASTM C32 STANDARD IN EFFECT AT THE TIME THE BRICK IS MANUFACTURED. CLAY OR SHALE. FOR GRADE SS HARD BRICK. WITH NO MORE THAN 5 LAYERS OF BRICK FOR GRADE ADJUSTMENT; (10) MORTAR SHALL BE COMPOSED OF PORTLAND CEMENT AND SAND WITH OR WITHOUT HYDRATED LIME ADDITION;

(11) PROPORTIONS IN MORTAR OF PARTS BY VOLUMES SHALL BE: A. 4.5 PARTS SAND AND 1.5 PARTS CEMENT; OR

B. 4.5 PARTS SAND, ONE PART CEMENT AND Ø.5 PART HYDRATED LIME; (12) CEMENT SHALL BE TYPE II PORTLAND CEMENT CONFORMING TO ASTM C150-05; (13) HYDRATED LIME SHALL BE TYPE S CONFORMING TO THE ASTM C207-06 STANDARD SPECIFICATIONS

FOR HYDRATED LIME FOR MASONRY PURPOSES ; (14) SAND SHALL CONSIST OF INERT NATURAL SAND CONFORMING TO THE ASTM C33-Ø3

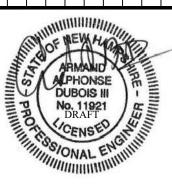
STANDARD SPECIFICATIONS FOR CONCRETE, FINE AGGREGATES ; (15) CONCRETE FOR DROP SUPPORTS SHALL CONFORM TO THE REQUIREMENT FOR CLASS AAA CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION IS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS AVAILABLE AT HTTP://WWW.NH.GOV/DOT/BUREAUS/HIGHWAYDESIGN/SPECIFICATIONS/INDEX.HTM; (16) SUBJECT TO (17), BELOW, A FLEXIBLE PIPE JOINT SHALL BE PROVIDED WITHIN THE FOLLOWING DISTANCES FROM ANY MANHOLE CONNECTION:

A. WITHIN 48 INCHES FOR REINFORCED CONCRETE (RC) PIPE; AND

B. WITHIN 60 INCHES FOR PVC PIPE LARGER THAN 15-INCH DIAMETER; (17) NO FLEXIBLE JOINT SHALL BE REQUIRED FOR:

B. PVC PIPE UP THROUGH 15-INCH DIAMETER; AND (18) WHEN MANHOLE DEPTH IS LESS THAN 6 FEET. A REINFORCED CONCRETE SLAB COVER MAY BE USED IN LIEU OF A CONE SECTION, PROVIDED THE SLAB HAS AN ECCENTRIC ENTRANCE OPENING AND BE CAPABLE OF SUPPORTING H-20 LOADS.

ALL WORK SHALL CONFORM TO THE CITY OF MANCHESTER STANDARD SPECIFICATIONS FOR ROAD, DRAIN AND SEWER CONSTRUCTION, CURRENT EDITION".

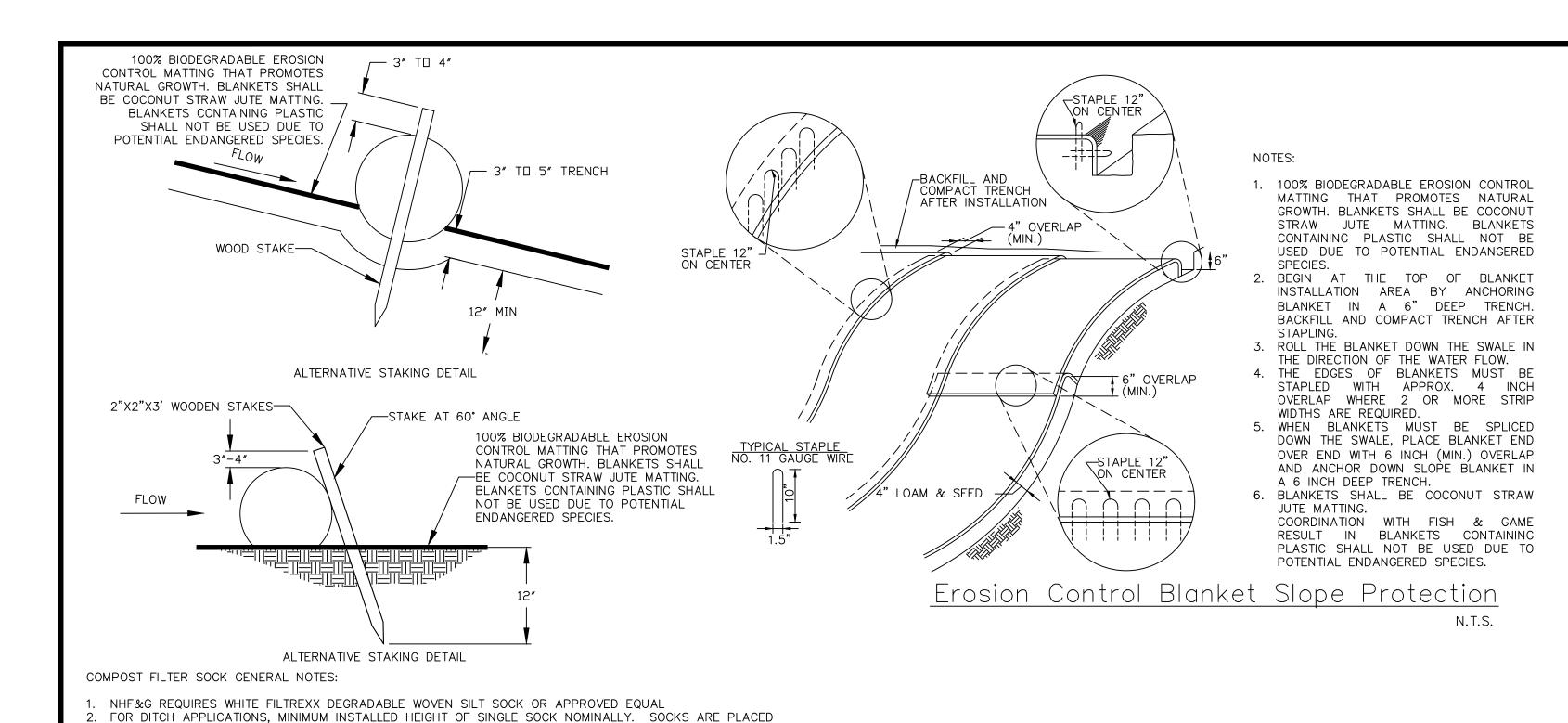




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ypical Sewer Trench Detail

N.T.S.



STORM-SEWER *GRATE* STRAPS REINFORCED CORNERS OPTIONAL OVERFLOW PORTS MANAGEABLE 2 FOOT CONTAINMENT AREA DUMPING STRAPS STORM INLET PROVIDE AND INSTALL DANDY SACK ® BY DANDY PRODUCT AND INSTALL PER MANUFACTURES RECOMMENDATIONS. Dandy Sack N.T.S.

FLAP FOLDS OVER TO ENCLOSE GRATE GRATE. VELCRO CLOSURE LIFTING STRAPS ALLOW EASY MOVEMENT OF DANDY BAG PATENT PENDING UNIT WITH GRATE -GRATE DANDY BAG TM SECTION A-A

INSTALLATION:
STAND GRATE ON END. PLACE DANDY BAG OVER GRATE.
ROLL GRATE OVER SO THAT OPEN END IS UP.
PULL UP SACK.
TUCK FLAP IN PREE VELCRO STRIPS TOGETHER. BE SURE END OF GRATE IS COMPLETELY COVERED BY FLAP OR DANDY BAG WILL NOT WORK PROPERLY.
HOLDING HANDLES, CAREFULLY PLACE DANDY BAG WITH GRATE INSERTED INTO CATCH BASIN FRAME. MAINTENANCE:
WITH A STIFF BRISTLE BROOM OR SQUARE POINT SHOVEL REMOVE SILT & OTHER DEBRIS OFF SURFACE AFTER EACH EVENT. REMOVE FINE MATERIAL FROM INSIDE ENVELOPE AS NEEDED.

(CONTACT DANDY PRODUCTS INC. 1-800-591-2284)

Dandy Baa N.T.S.

4" LOAM & SEED LIMESTONE, FERTILIZER, MULCH SEE EROSION CONTROL NOTES FOR PROCEDURES AND MIXTURES Loam & Seed Detail

– 10' MAX. 1 1/2"x 1 1/2"x 4' WOOD STAKE OR APPROVED EQUAL SILT FENCE MIRAFI 100X OR — APPROVED EQUAL WORK AREA FLOW

8" MIN.

PLACE 4" OF FABRIC

ALONG TRENCH AWAY -

FROM PROTECTED AREA BACKFILL AND TAMP

PERPENDICULAR TO FLOW OF WATER. FILTER SOCKS SHALL CONTINUE UP SIDE SLOPES TO TOP OF BANK OR MAXIMUM 3-FEET ABOVE INSTALLED HEIGHT. FILTER SOCKS SHALL REMAIN IN PLACE UNTIL ALL UPSTREAM

3. REMOVE SEDIMENT FROM BEHIND THE FILTER SOCK ONCE IT ACCUMULATES TO ONE-HALF OF THE ORIGINAL

4. INSPECT FILTER SOCKS AFTER EACH RUNOFF EVENT. REMOVE AND REPLACE IF SIGNS OF UNDERCUTTING OR

5. SOCKS SHOULD BE REMOVED FROM SLOPES AFTER STABILIZATION IS COMPLETE UNLESS DIRECTED OTHERWISE.
6. FILTER SOCKS APPLIED IN DITCHES SHALL BE COMPLETELY REMOVED ONCE VEGETATION IS ESTABLISHED.

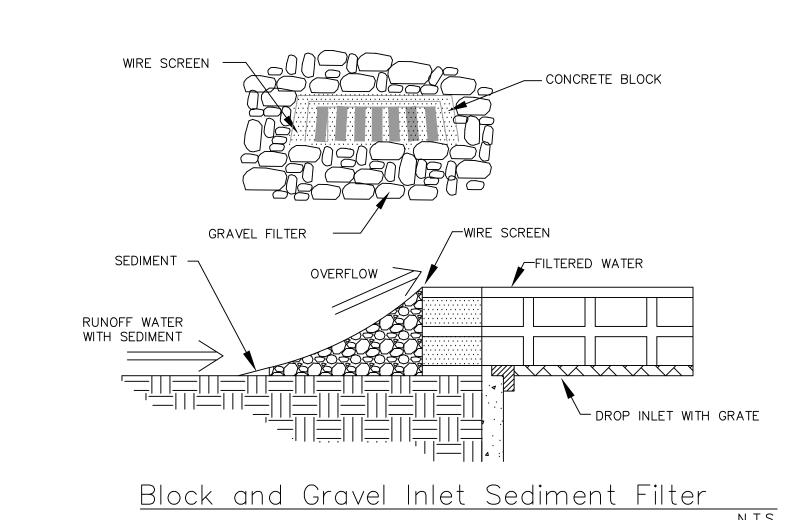
Compost Filter Sock Installation Detail

AREAS ARE PERMANENTLY STABILIZED.

DOWNSTREAM RILLS ARE OBSERVED.

HEIGHT OF THE FILTER SOCK.

Silt Fence Barrier



COLD WEATHER SITE STABILIZATION

PER ENV-WQ 1505.06 - COLD WEATHER SITE STABILIZATION.

- THE ADDITIONAL STABILIZATION TECHNIQUES SPECIFIED IN THIS SECTION SHALL BE EMPLOYED DURING THE PERIOD FROM OCTOBER 15 THROUGH MAY 1
- B. SUBJECT TO (C), BELOW, THE AREA OF EXPOSED, UNSTABILIZED SOIL SHALL BE: LIMITED TO ONE ACRE; AND
- 2. PROTECTED AGAINST EROSION BY THE METHODS DESCRIBED IN THIS SECTION PRIOR TO ANY THAW OR SPRING MELT EVENT.
- IS DEVELOPED BY A QUALIFIED ENGINEER OR A CPESC SPECIALIST AND SUBMITTED TO THE DEPARTMENT FOR APPROVAL AS A REQUEST TO WAIVE THE ONE-ACRE LIMIT.
- D. SUBJECT TO (F) AND (G), BELOW, ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF LESS THAN 15% THAT DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR THAT ARE DISTURBED AFTER OCTOBER 15, SHALL BE SEEDED AND COVERED WITH 3 TO 4 TONS OF HAY OR STRAW MULCH PER ACRE SECURED WITH ANCHORED NETTING OR TACKIFIER OR WITH
- E. SUBJECT TO (F) AND (G), BELOW, ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF 15% OR GREATER THAT DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR THAT ARE DISTURBED AFTER OCTOBER 15, SHALL BE SEEDED AND COVERED WITH A PROPERLY INSTALLED AND ANCHORED EROSION CONTROL BLANKET OR WITH AT LEAST 4 INCHES OF EROSION
- CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(B). F. ANCHORED HAY MULCH OR EROSION CONTROL MIX THAT MEETS THE CRITERIA OF ENV-WQ 1506.05(B) SHALL NOT BE INSTALLED OVER SNOW GREATER THAN ONE INCH IN DEPTH.
- G. EROSION CONTROL BLANKETS SHALL NOT BE INSTALLED OVER SNOW GREATER THAN ONE INCH IN DEPTH OR ON FROZEN GROUND.
- H. ALL PROPOSED STABILIZATION IN ACCORDANCE WITH (D) OR (E), ABOVE, SHALL BE COMPLETED WITHIN A DAY OF ESTABLISHING THE GRADE THAT IS FINAL OR THAT OTHERWISE WILL EXIST FOR
- I. ALL DITCHES OR SWALES THAT DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR THAT ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS, AS DETERMINED BY THE OWNER'S ENGINEERING CONSULTANT.
- J. AFTER OCTOBER 15, INCOMPLETE ROAD OR PARKING AREAS WHERE ACTIVE CONSTRUCTION OF 2016, TABLE 304-1, ITEM NO. 304.1, 304.2, OR 304.3, AVAILABLE AS NOTED IN APPENDIX B.

A. TO ADEQUATELY PROTECT WATER QUALITY DURING COLD WEATHER AND DURING SPRING RUNOFF,

C. THE ALLOWABLE AREA OF EXPOSED SOIL MAY BE INCREASED IF A WINTER CONSTRUCTION PLAN

AT LEAST 2 INCHES OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(B).

MORE THAN 5 DAYS.

THE ROAD OR PARKING AREA HAS STOPPED FOR THE WINTER SEASON SHALL BE PROTECTED WITH A MINIMUM 3-INCH LAYER OF BASE COURSE GRAVELS MEETING THE GRADATION REQUIREMENTS OF NHDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, APHONSE DUBOIS III

PROJ. No.: 20211191.A10 DATE: MAY 2022

DUST CONTROL NOTE

THE CONTRACTOR SHALL, IN ACCORDANCE WITH ENV-A 1000 "....TAKE PRECAUTIONS THROUGHOUT THE DURATION OF THE ACTIVITY IN ORDER TO PREVENT. ABATE, AND CONTROL THE EMISSION OF FUGITIVE DUST INCLUDING BUT NOT LIMITED TO WETTING, COVERING, SHIELDING, OR VACUUMING."

MAINTENANCE NOTES

SILT FENCE / FILTER SOCK

- 1. SILT FENCE/ FILTER SOCK SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
- 2. IF THE FABRIC ON A SILT FENCE OR THE FILTER SOCK SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE OR FILTER SOCK, THE FABRIC OR FILTER SOCK SHALL BE REPLACED PROMPTLY
- 3. SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF
- 4. SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND

BLOCK & GRAVEL INLET SEDIMENT FILTER

1. ALL STRUCTURES SHOULD BE INSPECTED AFTER EVERY RAIN STORM AND REPAIRS MADE AS NECESSARY. SEDIMENT SHOULD BE REMOVED FROM THE TRAPPING DEVICES AFTER THE SEDIMENT HAS REACHED A MAX. OF 1/2 THE DEPTH OF THE TRAP. THE SEDIMENT SHOULD BE DISPOSED OF IN A SUITABLE AREA AND PROTECTED FROM EROSION BY EITHER STRUCTURAL OR VEGETATIVE MEANS. THE TEMPORARY TRAPS SHOULD BE REMOVED AND THE AREA REPAIRED AS SOON AS THE CONTRIBUTING DRAINAGE AREA TO THE INLET HAS BEEN COMPLETELY STABILIZED.

TYPICAL CONSTRUCTION SEQUENCE

STABILIZED CONSTRUCTION ENTRANCE IN SUITABLE LOCATION.

WILL BE NECESSARY TO ACCOMPLISH THIS.

. CONSTRUCT ALL DITCHES AND SWALES.

13. INSTALL ALL UNDERGROUND UTILITIES.

STORM WATER INTO THEM. 11. CONSTRUCT SLOPED EMBANKMENTS.

REMOVE ONSITE UNDESIRABLE SOILS AND LEDGE.

INSTALL HAY BALE BARRIERS AND SILT FENCES IN LOCATIONS SHOWN ON PLANS

AS A MINIMUM. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE

INSTALLED PRIOR TO ANY EARTH MOVING OPERATION. PREPARE TEMPORARY

DAILY OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, CULVERTS, DITCHES, SILTATION FENCES, SEDIMENT TRAPS, ETC. MULCH AND SEED AS REQUIRED.

THE WORK AREA SHALL BE GRADED. SHAPED AND OTHERWISE DRAINED IN SUCH

A MANNER AS TO MINIMIZE SOIL EROSION, SILTATION OF DRAINAGE CHANNELS, DAMAGE TO EXISTING VEGETATION, AND DAMAGE TO PROPERTY OUTSIDE LIMITS

OF THE WORK AREA. SILT FENCES, FILTER SOCK AND/OR DETENTION BASINS

TOPSOIL SHALL BE STRIPPED AND STOCKPILED DURING DRY CONDITIONS AND

WITHOUT COMPACTION. TOPSOIL SHALL BE STABILIZED AGAINST EROSION.

GRUBBING AND STUMPING DISPOSAL IN AN APPROVED OFF-SITE LOCATION.

10. ALL DITCHES AND SWALES, SHALL BE STABILIZED PRIOR TO DIRECTING ANY

12. ROUGH GRADE SITE OR PHASED WORK AREA. DISTURBED AREAS SHALL BE

14. INSTALL DRAINAGE STRUCTURES, CULVERTS, HEADWALLS, RIP RAP, AND OTHER

15. FINISH GRADING, LOAMING AND SEEDING. ALL DISTURBED AREAS SHALL BE

17. TEMPORARY EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL ALL

DISTURBED AREAS ARE STABILIZED AND HAVE A HEALTHY VEGETATIVE COVER.

18. CLEAN ALL DRAINAGE STRUCTURE SUMPS OF SEDIMENT AND DEBRIS (INCLUDES

19. DUST SHALL BE CONTROLLED DURING CONSTRUCTION BY ADEQUATE USE OF

ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85%

GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH,

SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL

BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4

TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING ELSEWHERE.

THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING

SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND

VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER

OCTOBER 15TH. SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION

HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM

CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS; AND AFTER OCTOBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK

SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS:

OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.

SWALES MUST BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.

WINTER EROSION CONTROL NOTES

STABILIZED WITHIN 72 HOURS AFTER FINAL GRADING.

16. COMPLETE PERMANENT SEEDING AND LANDSCAPING.

ALL STRUCTURES WITHIN THE LIMITS OF WORK)

STABILIZED UPON COMPLETION OF ROUGH GRADING PER THE EROSION CONTROL

DRAINAGE FACILITIES. PLACE CATCH BASIN RIMS IN DANDY BAGS UNTIL

PARKING AREAS ARE PAVED. STORMWATER PONDS, INFILTRATION BASINS AND

4. CUT AND CLEAR TREES, DISPOSE OF DEBRIS IN AN APPROVED OFF-SITE

INSPECT AND MAINTAIN FROSION CONTROL MEASURES ON A DAILY BASIS

TYPICAL EROSION CONTROL NOTES

DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED:

- 1. INSTALLATION OF PERIMETER CONTROLS (SILT FENCE OR FILTER SOCK) SHALL BE COMPLETED PRIOR TO THE START OF SITE WORK IN ANY GIVEN AREA. PREFABRICATED SILT FENCES SHALL
- 2. PERIMETER CONTROLS SHALL BE KEPT CLEAN DURING CONSTRUCTION AND REMOVED WHEN ALL SLOPES HAVE A HEALTHY STAND OF VEGETATIVE COVER. EROSION CONTROL MEASURES SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EVERY RAINFALL.
- EXISTING VEGETATION IS TO REMAIN UNDISTURBED WHEREVER POSSIBLE 4. NO MORE THAN FIVE ACRES OF LAND SHALL BE LEFT DISTURBED AT ANY ONE TIME. ALL
- DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS AFTER FINAL GRADING. 5. STABILIZATION SHALL INCLUDE THE FOLLOWING, AT A MINIMUM:
- INSTALLATION OF BASE COURSE GRAVELS (IN PAVED AREAS)

BE INSTALLED ACCORDING TO THE MANUFACTURES' RECOMMENDATIONS.

- MIN. 85% VEGETATED GROWTH
- INSTALLATION OF STONE OR RIP RAP MATERIAL (3" MIN. DEPTH) PROPERLY INSTALLED EROSION CONTROL BLANKETS
- 6. ALL DISTURBED AREAS SHALL HAVE A MINIMUM OF 4" OF LOAM INSTALLED WITH NOT LESS THAN 1.1 POUNDS OF SEED MIX PER 1,000 SQ. FT. SEED MIXTURE SHALL BE:

PERMANENT TALL FESCUE

TEMPORARY

ANNUAL RYEGRASS

0.45 LBS. CREEPING RED FESCUE 0.45 LBS. BIRDSFOOT TREFOIL 0.20 LBS.

1.10 LBS.

7. LIME AND FERTILIZER SHALL BE INCORPORATED INTO THE SOIL PRIOR TO SEEDING. A MINIMUM OF 2 TONS PER ACRE OF AGRICULTURAL LIMESTONE AND 500 LBS. PER ACRE OF 10-20-20 FERTILIZER SHALL BE APPLIED. SEEDING PRACTICES SHALL COMPLY WITH LOCAL USDA SOIL CONSERVATION SERVICES RECOMMENDATIONS.

8. HAY MULCH OR JUTE MATTING SHALL BE USED WHERE INDICATED ON THE PLANS. A MINIMUM OF 1.5 TONS OF MULCH PER ACRE SHALL BE APPLIED. MULCH SHALL BE ANCHORED IN PLACE WHERE NECESSARY. JUTE MATTING SHALL BE LAID IN THE DIRECTION OF RUNOFF FLOW AND APPLIED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.

9. PERMANENT OR TEMPORARY COVER MUST BE IN PLACE BEFORE THE GROWING SEASON ENDS. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS BAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 15 TO SEPTEMBER 15. NO DISTURBED AREA SHALL BE LEFT EXPOSED DURING WINTER MONTHS, PLANT ANNUAL RYE GRASS PRIOR TO OCTOBER 15TH.

10. THE LAND AREA EXPOSED SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME AND

SHALL NOT REMAIN EXPOSED MORE THAN 45 DAYS FROM INITIAL DISTURBANCE. 11. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED

12. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED: BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED

A MINIMUM OF 85% OF VEGETATED GROWTH HAS BEEN ESTABLISHED

 A MINIMUM OF 3" NON EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

13. ALL CONTRIBUTING WATERSHED AREAS MUST BE FULLY STABILIZED PRIOR TO DIRECTING STORMWATER TO THEM. 14. ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY 0.25" OR GREATER

RAINFALL WITHIN A 24-HOUR PERIOD. 15. TEMPORARY WATER DIVERSION (SEDIMENT BASINS, SWALES, ETC.) MUST BE USED AS NECESSARY TO CONTAIN RUNOFF UNTIL SOILS ARE STABILIZED.

16. CUT AND FILL SLOPES MUST BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE. 17. STORMWATER BASINS AND SWALES MUST BE INSTALLED BEFORE ROUGH GRADING THE SITE. 18. STORMWATER BASINS AND SWALES MUST BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.

> 50' MIN. - 75' LENGTH ON ENTRANCES 50' OR WIDER

> > **PROFILE**

<u>PLAN VIEW</u>

50' MIN.

-75' LENGTH ON ENTRANCES 50' OR WIDER

1. FILTER CLOTH — WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.

2. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION

ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A

3. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT

TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE

PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR

4. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO

USDA — SCS Stabilized Construction Entrance

DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED

AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED,

10" MIN.

3" STONE

10' MIN. OR WIDTH OF

CONSTRUCTION ACCESS WAY

WHICHEVER IS GREATER

MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED

IMMEDIATELY.

FILTER CLOTH

(SPUNBOUND 1135 MIRAFI 600X

OR EQUIVALENT)

EXISTING

- GROUND

TEMPORARY SEDIMENT TRAP NOTES

- 1. TEMPORARY SEDIMENT TRAPS SHOULD MEET THE FOLLOWING REQUIREMENTS: • SEDIMENT TRAPS SHOULD BE LOCATED SO THAT THEY CAN BE INSTALLED
 - PRIOR TO DISTURBING THE AREA THEY ARE TO PROTECT. • THE TRAP SHOULD BE INSTALLED AS CLOSE TO THE DISTURBED AREA OR SOURCE OF SEDIMENT AS POSSIBLE.
 - THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE TRAP SHOULD BE LESS THAN 5 ACRES.
- THE MINIMUM VOLUME OF THE TRAP SHOULD BE 3,600 CUBIC FEET OF
- STORAGE FOR EACH ACRE OF DRAINAGE AREA. • THE SIDE SLOPES OF THE TRAP SHOULD BE 3:1 OR FLATTER, AND SHOULD BE STABILIZED IMMEDIATELY AFTER THEIR CONSTRUCTION.

• THE MAXIMUM HEIGHT OF THE SEDIMENT TRAP EMBANKMENT SHOULD BE 4 FEET WHEN MEASURED FROM THE LOWEST POINT OF NATURAL GROUND ON THE DOWNSTREAM SIDE OF THE EMBANKMENT.

• THE MINIMUM TOP WIDTH OF THE EMBANKMENT SHOULD BE 6 FEET.

- 3. OUTLETS (GENERAL REQUIREMENTS): • THE OUTLET SHOULD BE DESIGNED, CONSTRUCTED AND MAINTAINED IN SUCH A MANNER THAT SEDIMENT DOES NOT LEAVE THE TRAP AND THAT EROSION AT OR BELOW THE OUTLET DOES NOT OCCUR.
- OUTLETS SHOULD BE DESIGNED SO THAT THE TOP OF THE EMBANKMENT IS A MINIMUM OF 1 FOOT ABOVE THE CREST ELEVATION OF THE OUTLET.
- THE OUTLET OF THE TRAP SHOULD BE A MINIMUM OF ONE FOOT BELOW THE • THE OUTLET SHOULD DISCHARGE TO A STABILIZED AREA. THE OUTLETS MUST
- EMPTY ONTO UNDISTURBED GROUND, INTO A WATERCOURSE, STABILIZED CHANNEL OR A STORM SEWER SYSTEM. • OUTLETS MAY BE CONSTRUCTED AS EARTH SPILLWAYS, STONE OUTLETS, OR PIPE OUTLETS.

4. EARTH OUTLETS:

- AN EARTH OUTLET SEDIMENT TRAP HAS A DISCHARGE POINT THAT IS EITHER. OVER NATURAL GROUND OR CUT INTO NATURAL GROUND.
- THE OUTLET WIDTH SHOULD BE EQUAL TO 6 TIMES THE DRAINAGE AREA IN
- THE EMBANKMENT AND OUTLET SHOULD BE VEGETATED WITHIN 3 DAYS OF CONSTRUCTION.

5. STONE OUTLETS

- A STONE OUTLET SEDIMENT TRAP HAS AN OUTLET CONSISTING OF A CRUSHED STONE SECTION IN THE EMBANKMENT • THE STONE SECTION SHOULD BE LOCATED AT THE LOW POINT OF THE
- NATURAL GROUND, AS DETERMINED AT THE DOWNSTREAM SIDE OF THE • THE OUTLET SHOULD BE CONSTRUCTED OF MINIMUM SIZE 1 ½ CRUSHED STONE.

EXISTING

PAVEMENT

MOUNTABLE BERM

– 10'MIN. --------

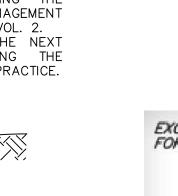
EXISTING

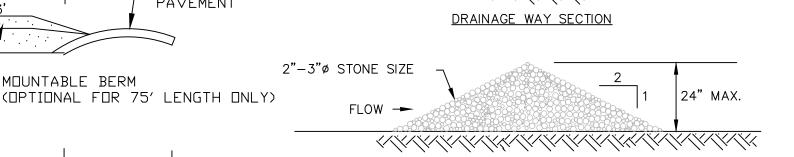
PAVEMENT

• ALL EMBANKMENTS, EARTH SPILLWAYS, AND DISTURBED AREAS BELOW THE STRUCTURE SHOULD BE VEGETATED WITHIN 72 HOURS OF COMPLETION OF THE CONSTRUCTION OF THE STRUCTURE.

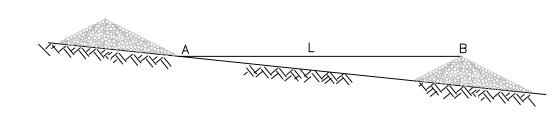
• IF THE STRUCTURE IS NOT PLANNED FOR MORE THAN ONE VEGETATIVE GROWING SEASON, THE STRUCTURE MAY BE VEGETATED USING THE RECOMMENDATION OF THE TEMPORARY VEGETATION BEST MANAGEMENT PRACTICE DESCRIBED IN NHDES STORMWATER MANAGEMENT MANUAL, VOL. 2.

• BASINS THAT WILL BE CARRIED OVER THE WINTER AND INTO THE NEXT VEGETATIVE GROWING SEASON SHOULD BE VEGETATED USING THE RECOMMENDATIONS FOR PERMANENT VEGETATION BEST MANAGEMENT PRACTICE.





STONE CHECK DAM SECTION



STONE CHECK DAM SPACING L = THE DISTANCE SUCH THATTHE ELEV. A = THE ELEV. B

MAINTENANCE:

1. TEMPORARY GRADE STABILIZATION STRUCTURES SHOULD BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED STORMS. ANY NECESSARY REPAIRS SHOULD BE MADE IMMEDIATELY. PARTICULAR ATTENTION SHOULD BE GIVEN TO END RUN AND EROSION AT THE DOWNSTREAM TOE OF THE STRUCTURE. WHEN THE STRUCTURES ARE REMOVED, THE DISTURBED PORTION SHOULD BE BROUGHT TO THE EXISTING CHANNEL GRADE AND THE AREAS PREPARED, SEEDED AND MULCHED. WHILE THIS PRACTICE IS NOT INTENDED TO BE USED PRIMARILY FOR SEDIMENT TRAPPING, SOME SEDIMENT WILL ACCUMULATE BEHIND THE STRUCTURES. SEDIMENT SHALL BE REMOVED FROM BEHIND THE STRUCTURES WHEN IT HAS ACCUMULATED TO ONE HALF OF THE ORIGINAL HEIGHT OF THE STRUCTURE.

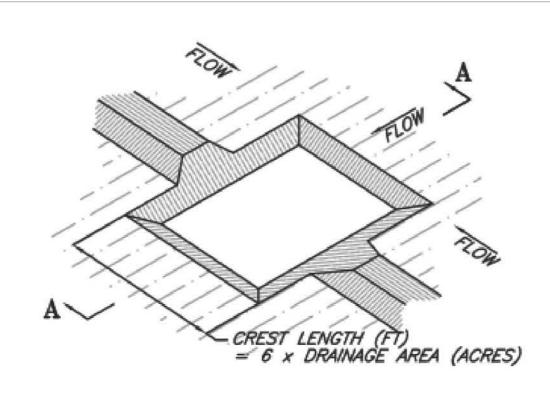
CONSTRUCTION SPECIFICATIONS:

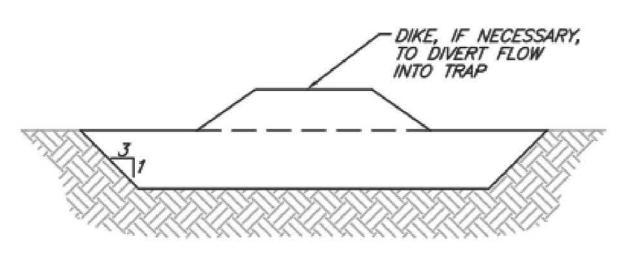
- 1. DAMS SHALL BE INSTALLED AT THE LOCATIONS SHOWN ON THE PLANS.
- CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER SO THAT EROSION AND AIR AND WATER POLLUTION WILL BE MINIMIZED.
- LIFE HAS BE COMPLETED. 4. STONE SHALL BE FRACTURED FACE STONE. D50 SIZE SHALL BE 2 TO 3

3. STRUCTURES SHALL BE REMOVED FROM THE CHANNEL WHEN THEIR USEFUL

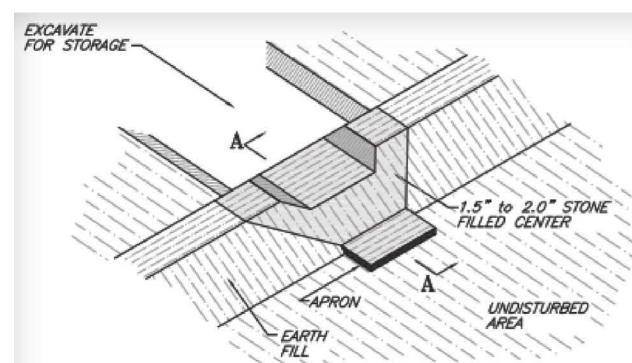
INCHES. NO STONE SMALLER THAN 1-1/2 INCHES OR LARGER THAN 4 INCHES

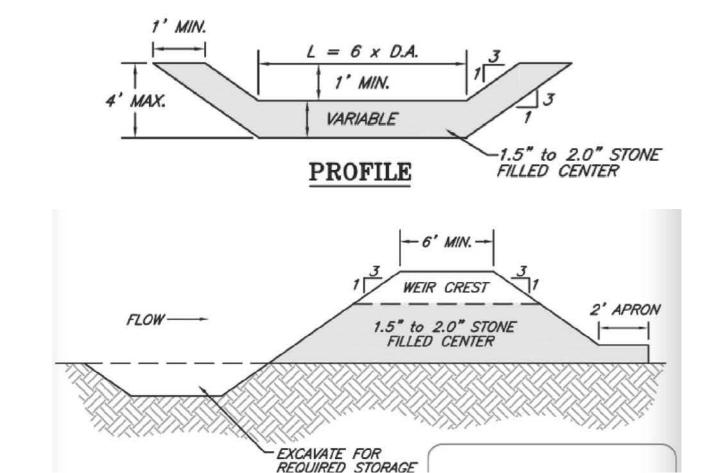
Typical Stone Check Dam Detail N.T.S.





Earth Outlet Temporary Sediment Trap N.T.S.





Temporary Sediment Trap

ARMAND

DUBOIS III

No. 11921

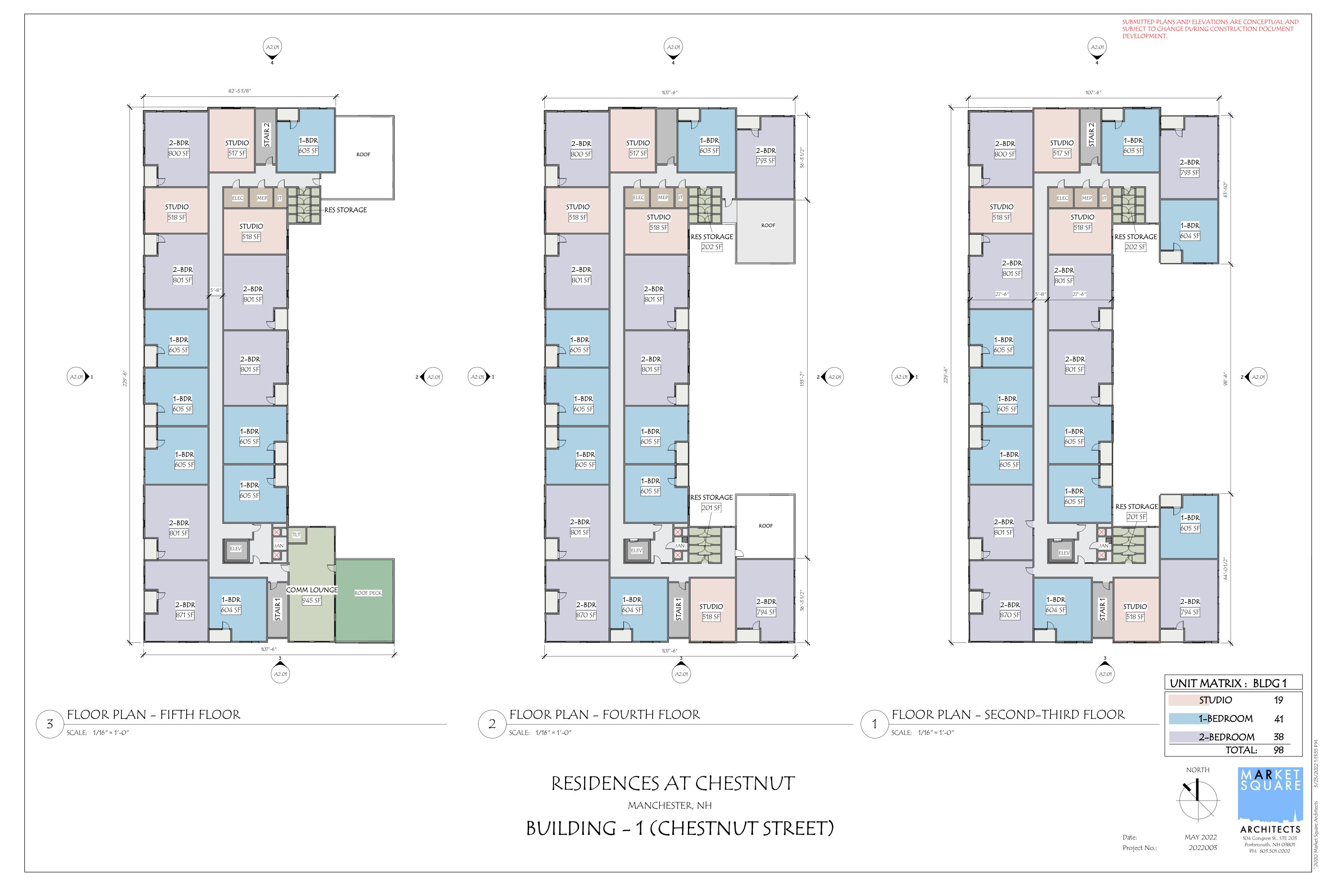
PROJ. No.: 20211191.A10 DATE: MAY 2022 CD-508

2. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85%

WATER.

N.T.S.









ELEVATION - MANCHESTER STREET (NORTH)

SCALE: 1/16" = 1'-0"



ELEVATION - ALLEY (EAST)

SCALE: 1/16'' = 1'-0''



ELEVATION - MERRIMACK STREET (SOUTH)

SCALE: 1/16" = 1'-0"

ELEVATION - CHESTNUT STREET (WEST) SCALE: 1/16" = 1'-0"

RESIDENCES AT CHESTNUT MANCHESTER, NH

BUILDING - 1 (CHESTNUT STREET)

